

# Exploring OpenCPN Subjects

- FIND THE MANUAL: not always obvious
- ADD CHARTS: need to see where you are
- CHART GROUPS: a bit of housekeeping/organizing
- PROGRAM SETTINGS (GPS, Vector Charts, Language/Fonts)
- ROUTES: create, save, change and display
- LOCK WAYPOINTS: avoid 'finger farts'
- TRACKS: create, save and display
- ANCHORAGES: save and display
- LAYERS: create and display
- PLUGINS: enhancements that add to the experience

# FIND THE MANUAL

On the Tool Bar click on the 'Book' icon with the '?' mark.



# FIND THE MANUAL

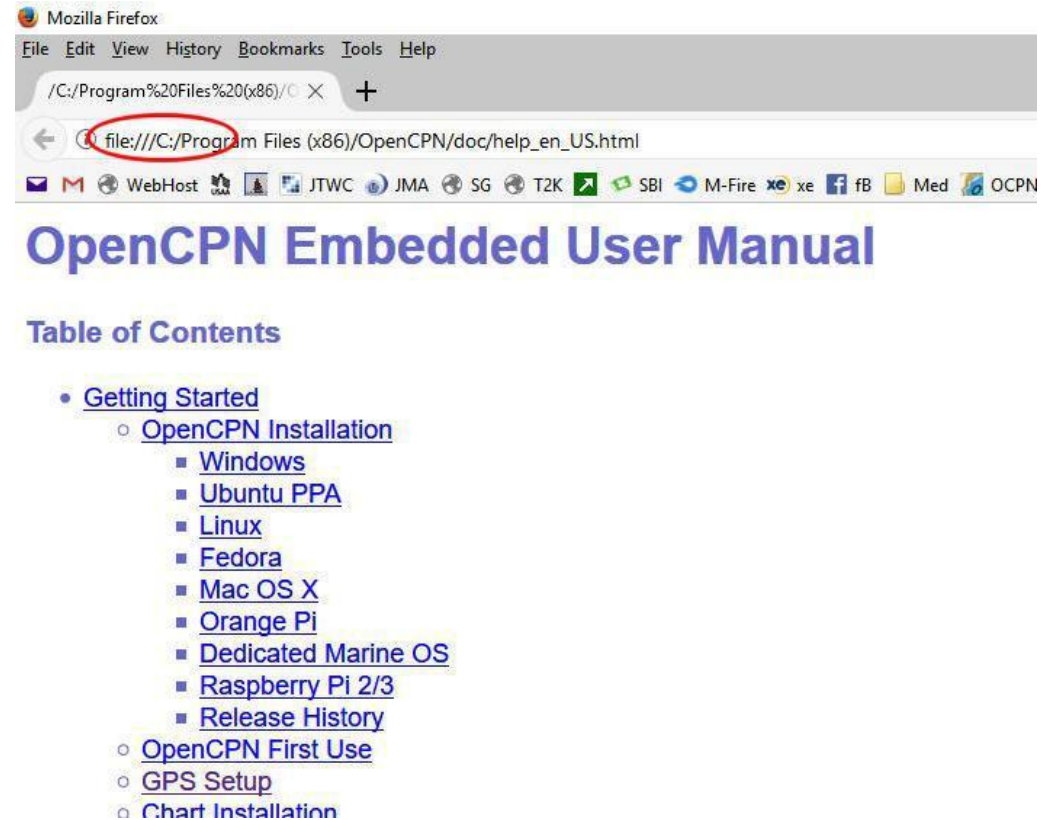
Click on the 'Help' tab.



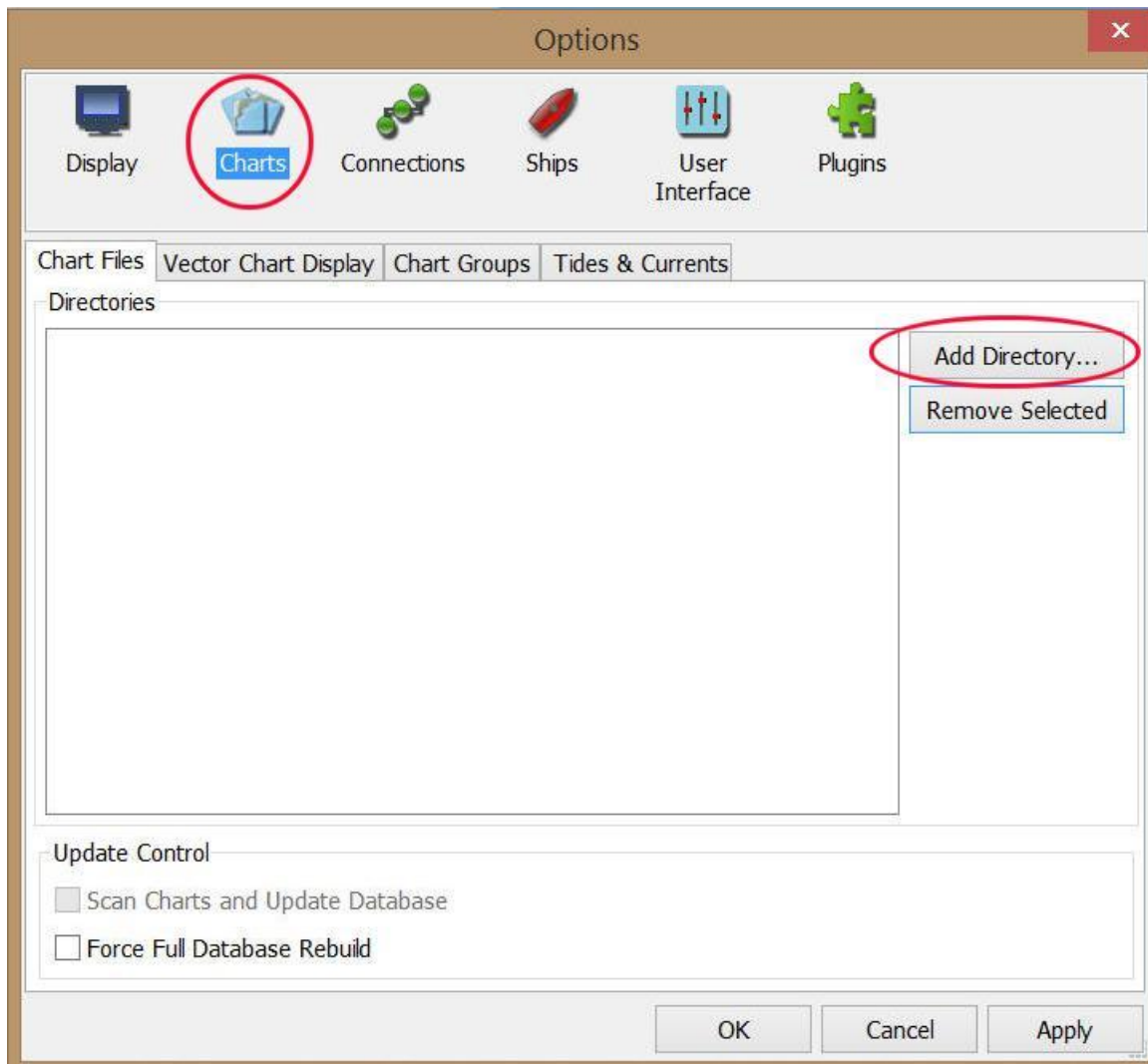
# FIND THE MANUAL

The Embedded User Manual opens within your computer browser (Firefox, Internet Explorer, etc)

Note that you do not need to be online. The browser is running from within the computer.



# ADD CHARTS



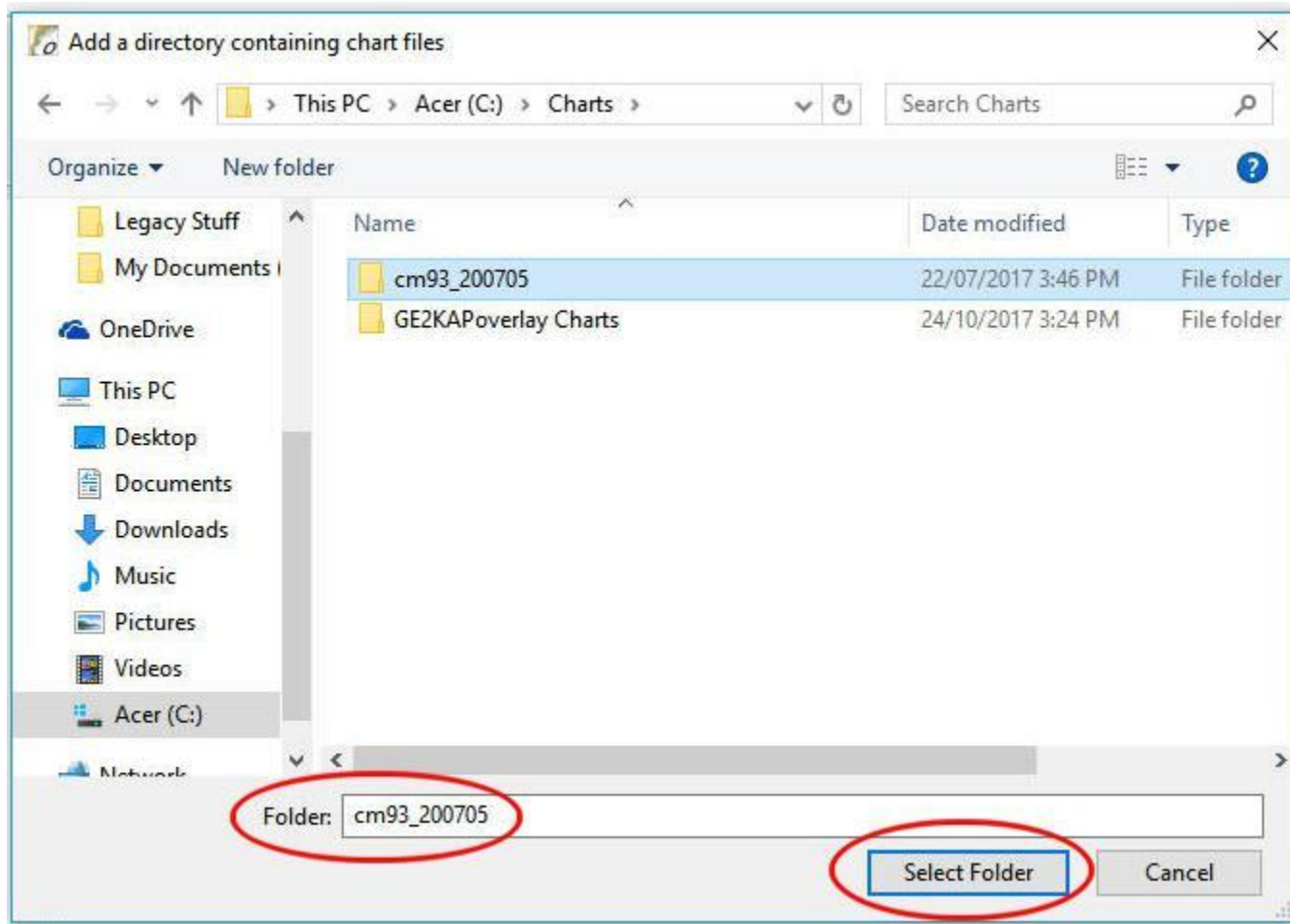
On the Tool Bar click on 'Options' (the 'wrench') to display this page

Click on 'Charts'.

Click on 'Add Directory ...'

# ADD CHARTS

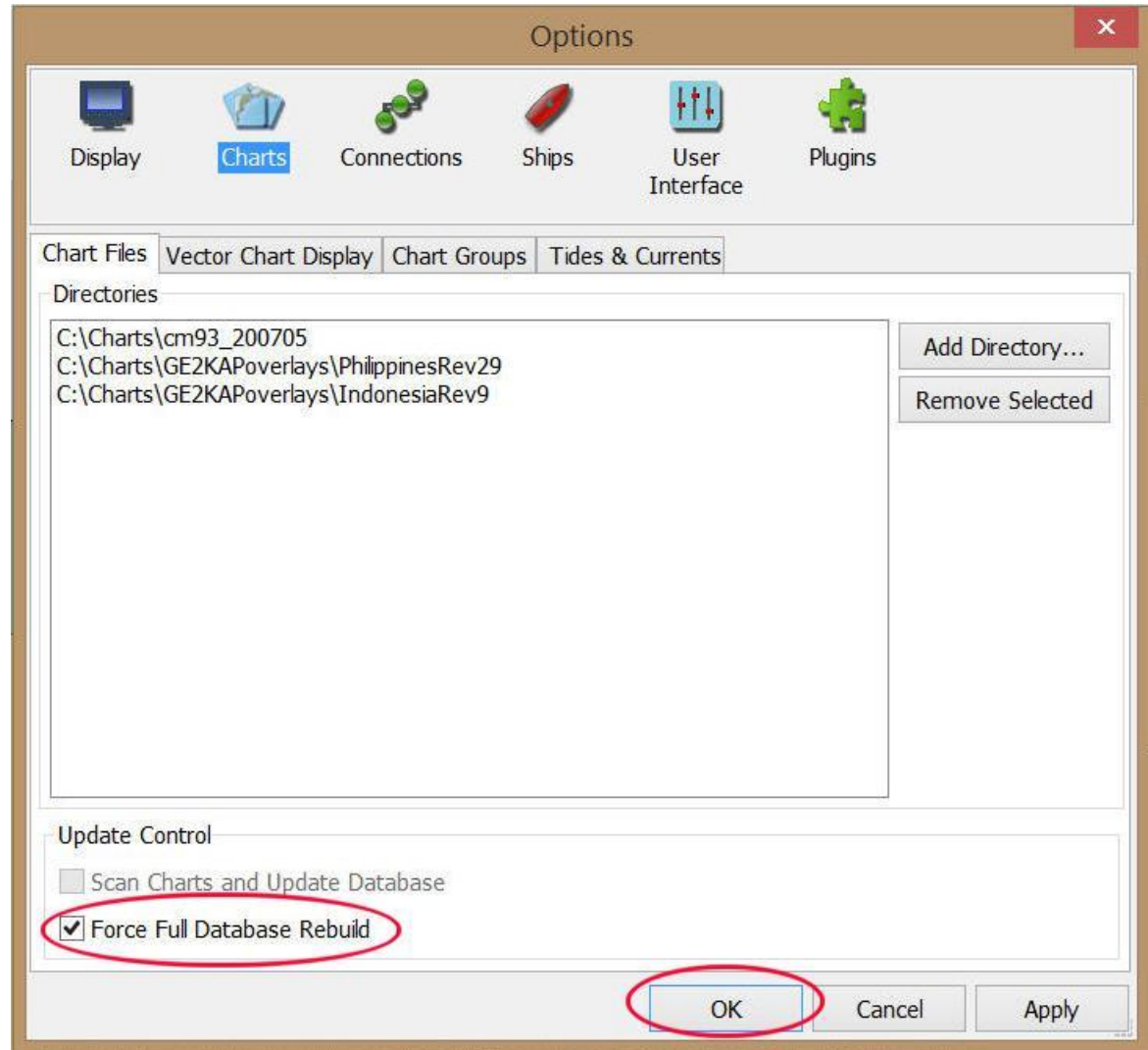
Navigate to where you have charts stored on your computer. Select the chart folder you want to add (in this case the cm93 vector charts). Click on 'Select Folder'



# ADD CHARTS

Select the other charts you want to add. In this case I have selected GE2KAP overlay charts of the Philippines and of Indonesia. Check the box 'Force Full Database Rebuild' and click 'OK' which closes the screen.

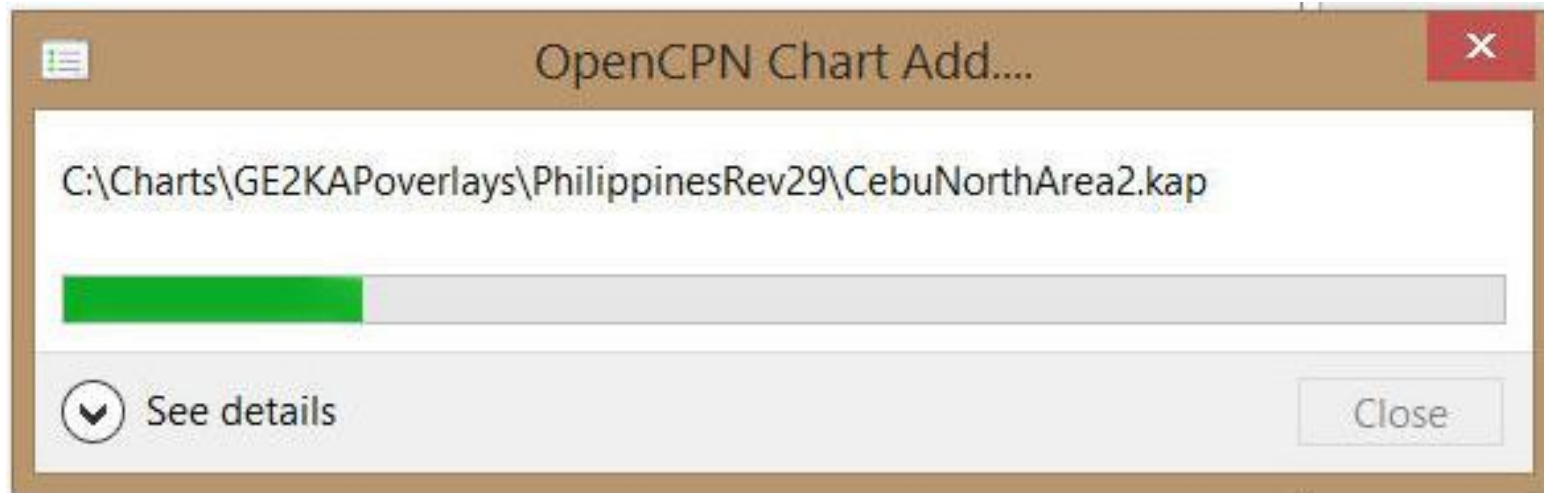
(Checking 'Apply' leaves this screen open)





# ADD CHARTS

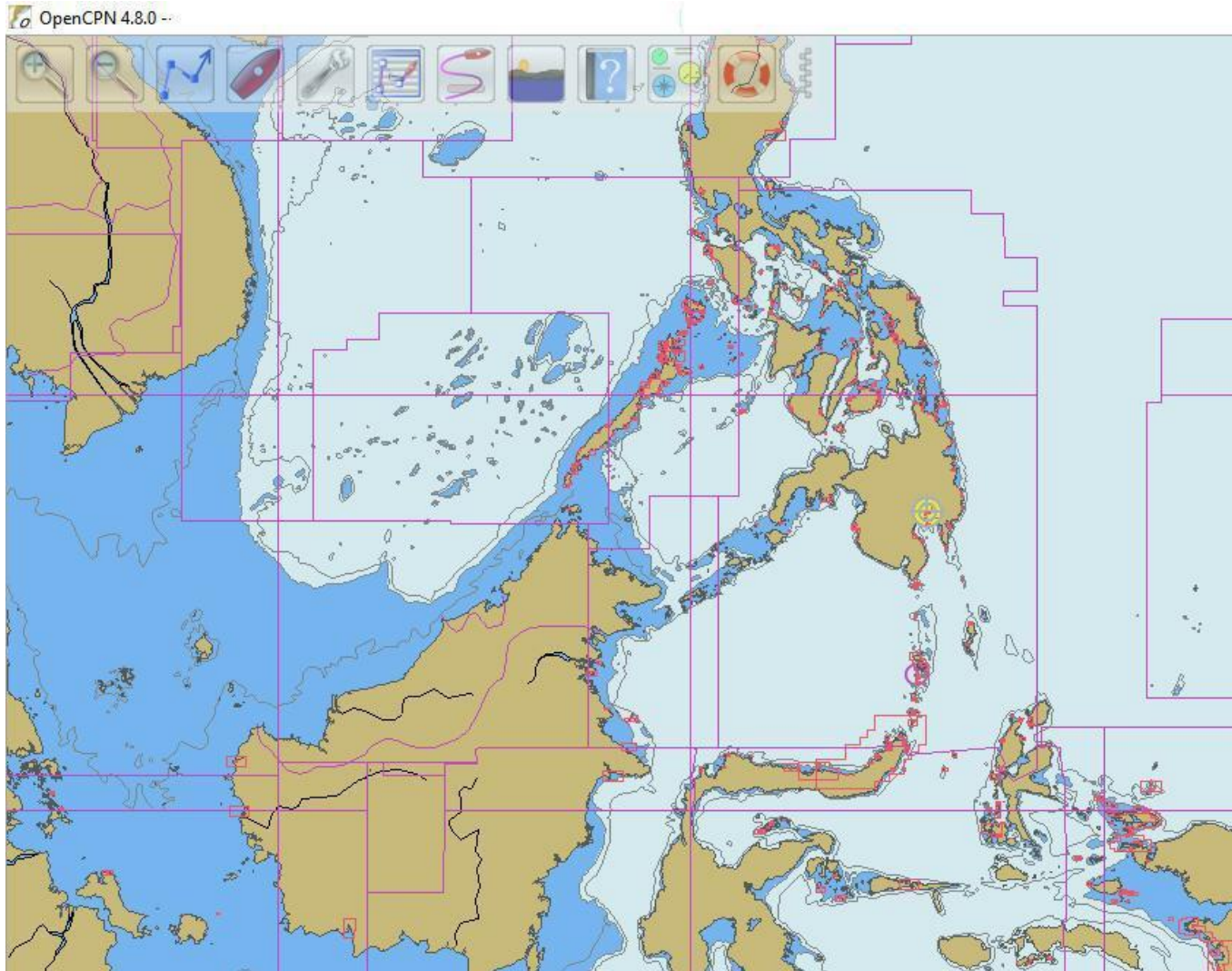
Wait while the database is updated.





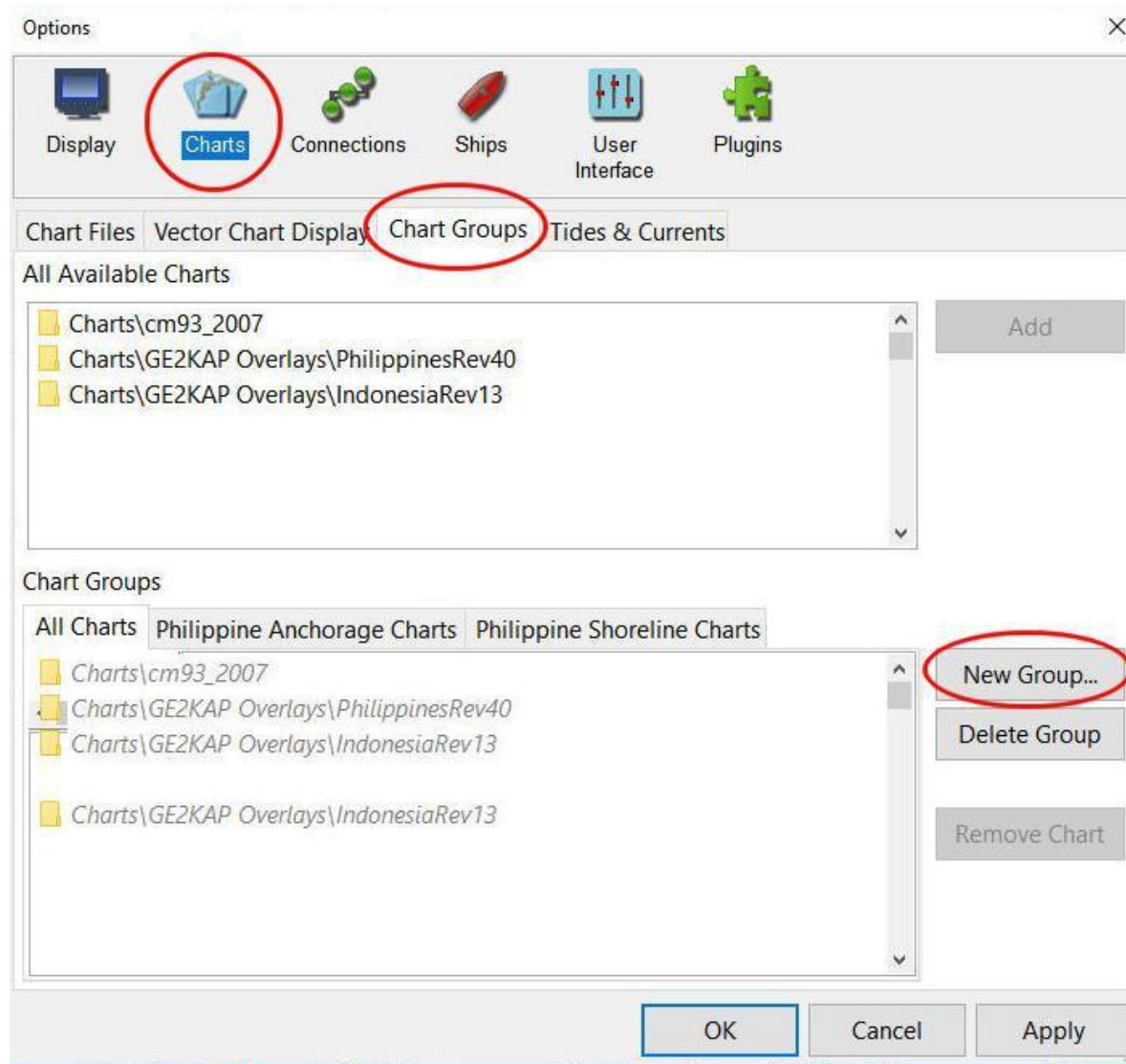
# ADD CHARTS

The overlay charts are shown by the small red outlines. To avoid slowing down the computer it is good to have 'Chart Groups'



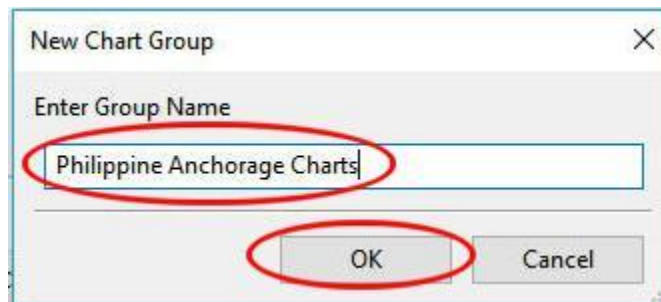
# CHART GROUPS

On the 'Options/Charts/Chart Groups' page, click on 'New Group ...'



# CHART GROUPS

Enter a name for the group and click 'OK'

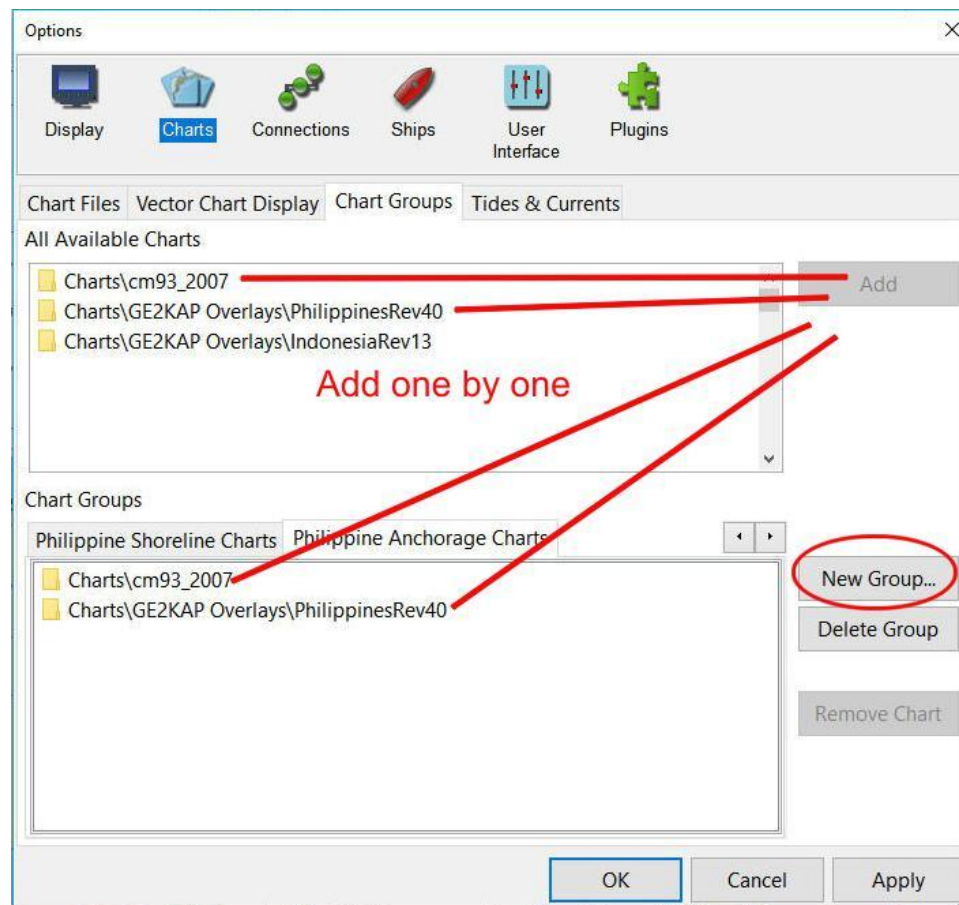


Highlight the charts to be added to this group, one by one, and click on 'Add'.

I recommend adding the cm93 charts to each group.

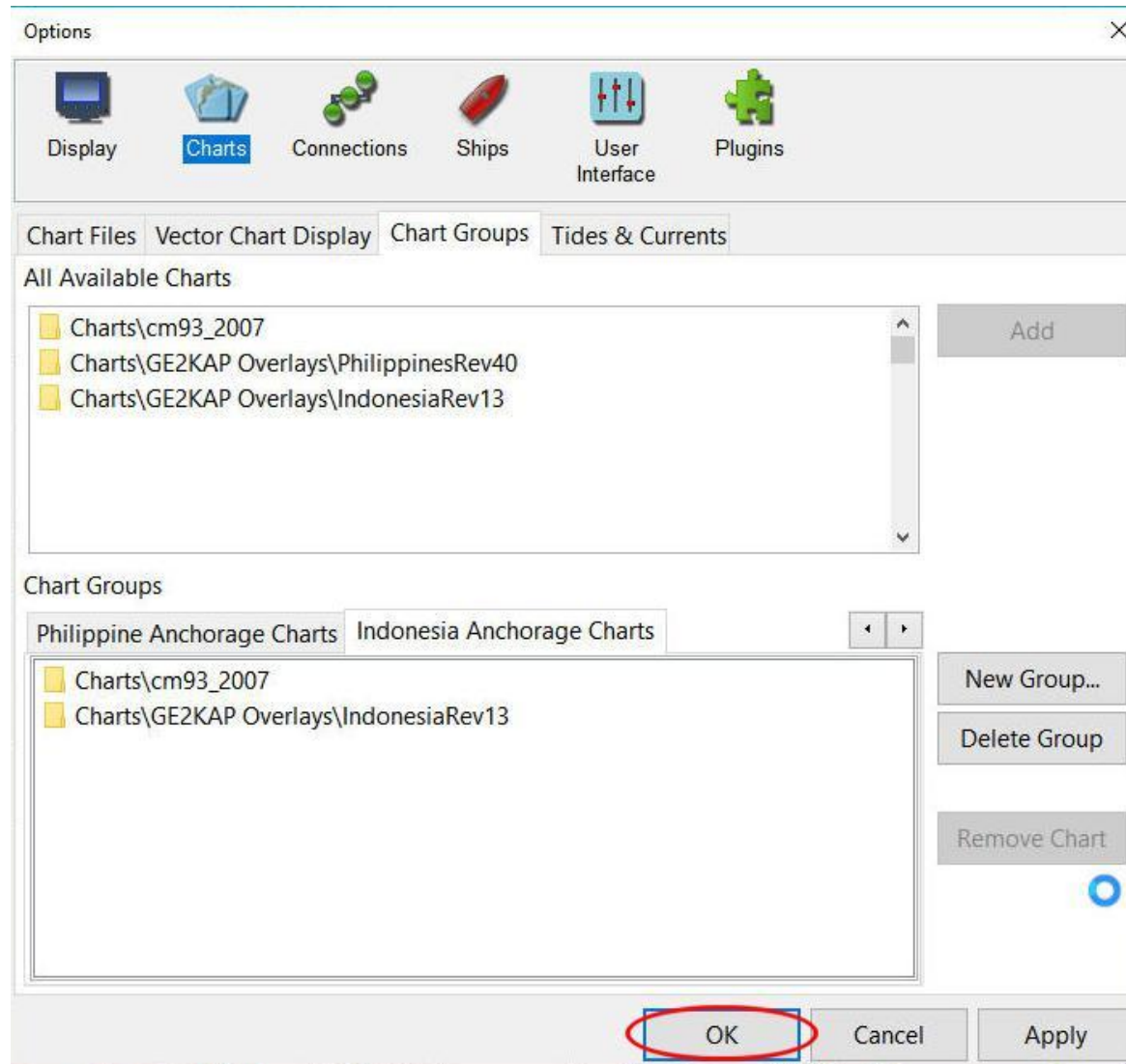
The selected charts appear in the group.

For the next group click on 'New Group ..'



# CHART GROUPS

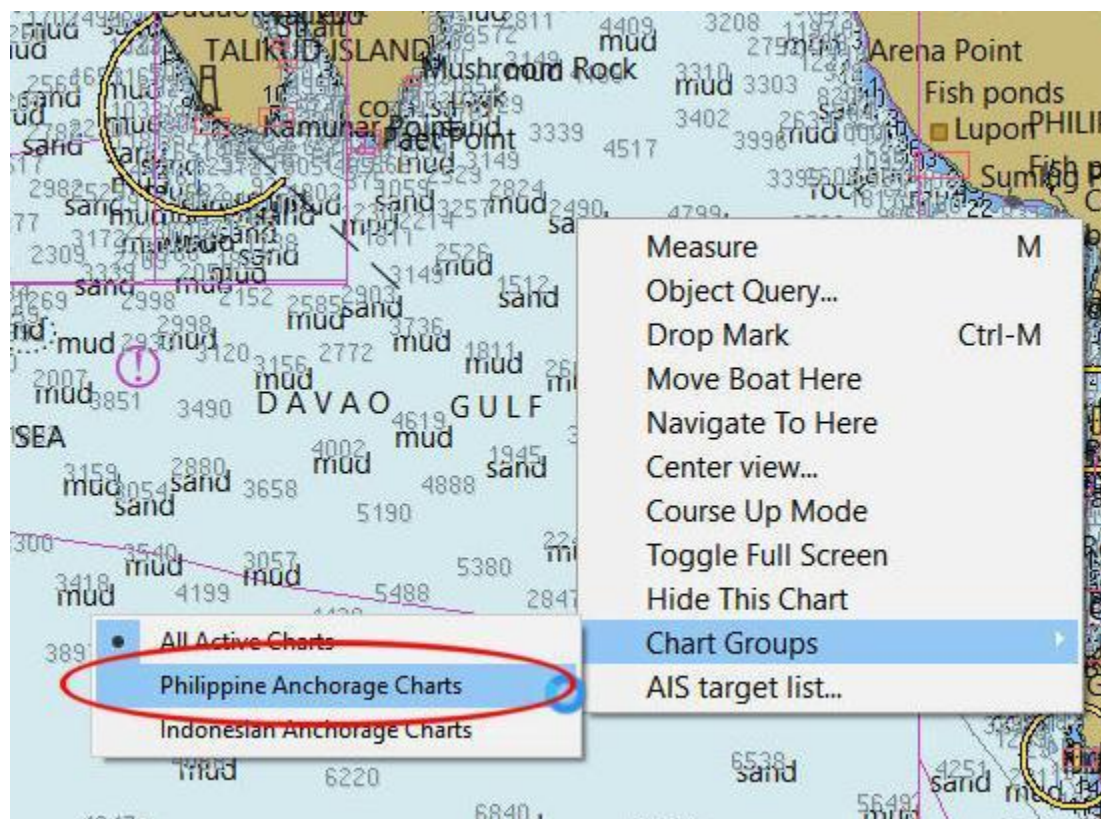
Here the second group for Indonesia charts has been created. Click on 'OK'





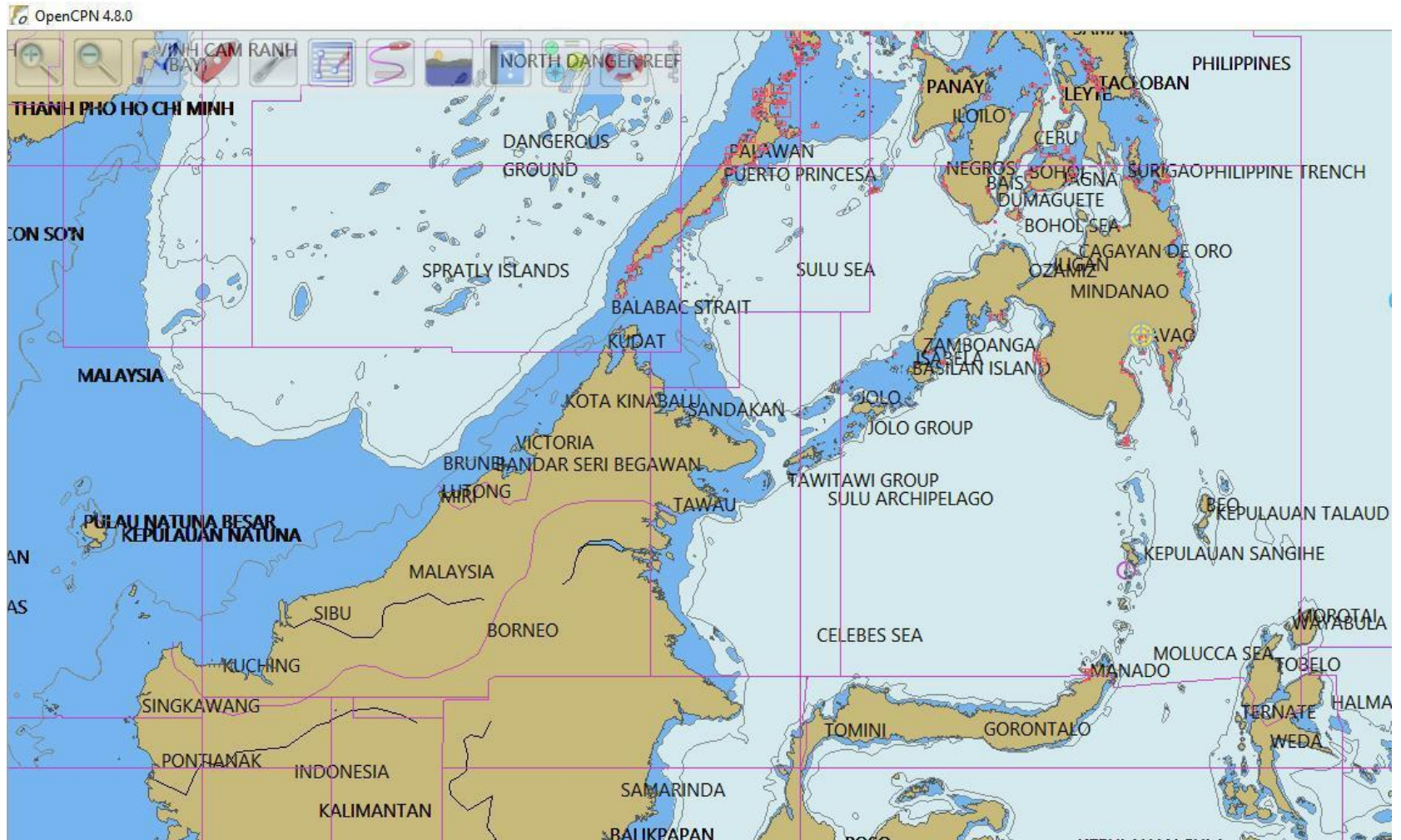
# CHART GROUPS

To display a desired chart group, right-click on the OpenCPN screen and click on 'Chart Groups' then click on the one you want to be displayed e.g. Philippine Anchorage Charts.



# CHART GROUPS

The Indonesian charts are not displayed. They will not be moved to slow down the computer but are available at any time for display.



# CHART GROUPS

## Shortcuts

A convenient feature to switch between chart groups is to use the number keys as shortcuts to the chart groups.

‘0’ displays all active charts.

‘1’ displays the first chart group that was created.

‘2’ displays the second chart group that was created. ‘etc’



# **PROGRAM SETTINGS**

## **GPS**

### **GPS Installation & Connection**

When OpenCPN is first installed, there are no connections to a device to provide position, course and speed information to the program. To obtain this needed information for use underway it is necessary to obtain a GPS signal from an external device such as a fixed or handheld GPS or some other device such as an AIS receiver or transceiver which has the data available.

# PROGRAM SETTINGS

## GPS

A COM Port is usually used though other connections such as Bluetooth and network connections can be used as well. I will describe using an external 'hocky puck' USB GPS which is reasonably priced and does an excellent job as long as it has a view of the sky and not inhibited by the vessel construction (such as metal whereas FRG is OK)

# PROGRAM SETTINGS

## GPS

For this example I've picked the Globalsat BU-353S4.



Although an optical disk with drivers comes with the GPS, I recommend you download the latest driver from the GPS support website, in this case:

<http://usglobalsat.com/Page/31/BU-353-S4-Support>

## BU-353-S4 Support

[<< Back To USB Support](#)

### Downloads:

[Linux USB Driver](#)  
[MAC OS X 10.5 \(or lower\) USB Driver](#)  
[Mac OS X 10.6 \(or above\) USB Driver](#)  
[MAC OS X GPS Utility](#)  
[MAC OS X BU-353-S4 User Manual](#)  
[Windows CE USB Driver](#)  
[Windows 10/8/7/Vista/XP USB Driver](#)  
[GPS Info for Windows 10/8/7/Vista/XP](#)  
[Windows BU-353-S4 User Manual](#)  
[BU-353-S4 High Resolution Images](#)  
[BU-353-S4 Datasheet](#)

### Other:

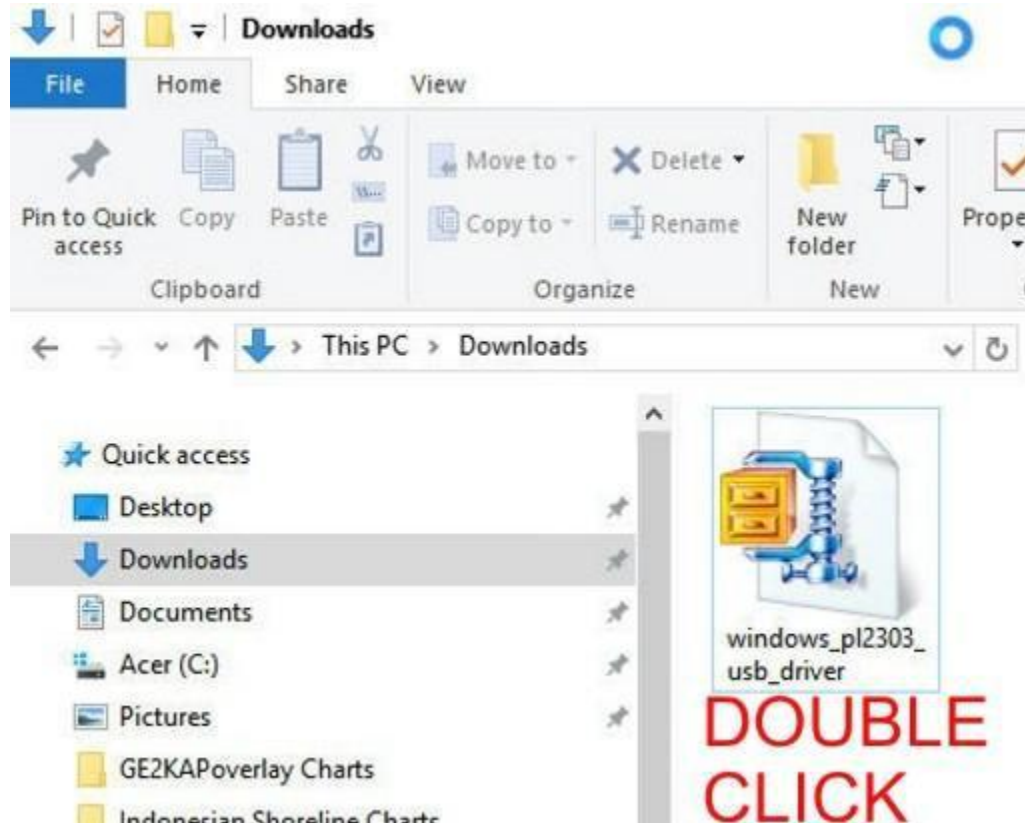
[Forum Discussion](#)  
[BU-353-S4 GPS F.A.Q.'s](#)  
[Product Page](#)



# PROGRAM SETTINGS

## GPS

Navigate to the Downloads folder on the computer and double-click on the downloaded compressed file.



# PROGRAM SETTINGS

## GPS

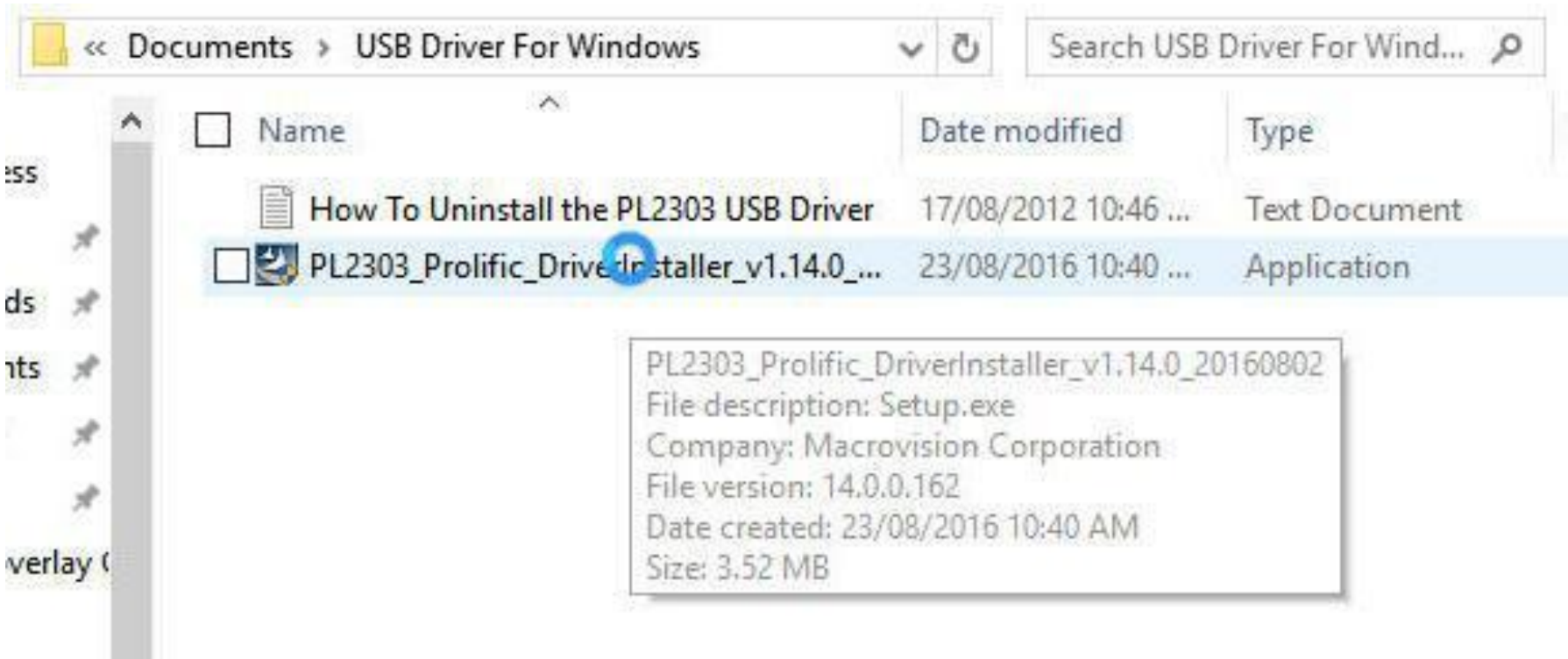
Uncompress and save to a convenient location. In this case I have extracted to the Documents folder on the computer. The folder name is 'USB Driver For Windows'



# PROGRAM SETTINGS

## GPS

Navigate to where it was saved, open the folder and launch the installer (double-click). Follow the prompts to the 'Finish' and the driver will be installed





# **PROGRAM SETTINGS**

## **GPS**

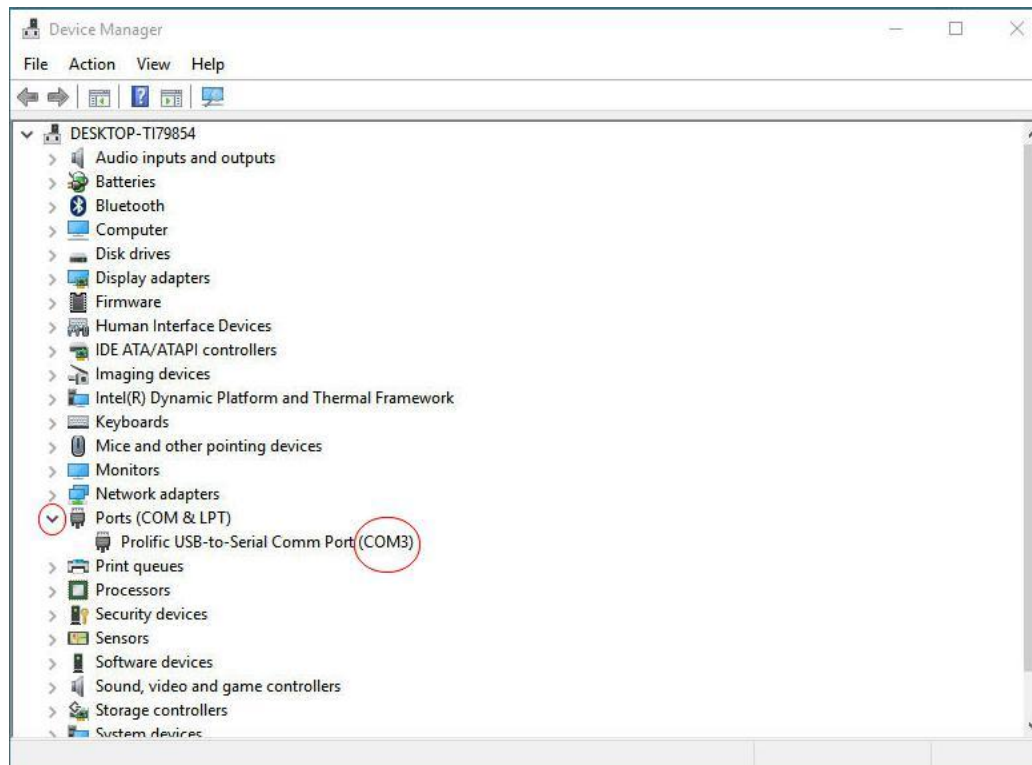
### **FINDING THE COM PORT NUMBER**

The computer has the driver ready to be associated with the COM ports on the machine. When you insert the GPS into a USB port, a COM Port number will be assigned by the computer. You will need to know this number when linking the GPS to OpenCPN.

# PROGRAM SETTINGS

## GPS

Insert the GPS into any USB port. Go to the **Device Manager** on the computer. Click on the '>' to the left of the entry 'Ports (COM & LPT)'. Note the GPS in this USB port is assigned 'COM3'



# PROGRAM SETTINGS

## GPS

### *How do I know if the GPS is ON?*

Your USB GPS must be plugged into your laptop's USB port to get power. If your PC is on and the COM port was configured properly, the GPS receiver is on and receiving the streaming GPS data. In addition the Globalsat USB GPS has a built-in LED status indicator that shows the following:

#### ***LED OFF:***

GPS receiver is off (no power).

#### ***LED ON***

(solid): No fix, searching for GPS signals.

#### ***LED FLASHING:***

Position fix established and GPS signals are being received.

# **PROGRAM SETTINGS**

## **GPS**

### **OpenCPN CONNECTION**

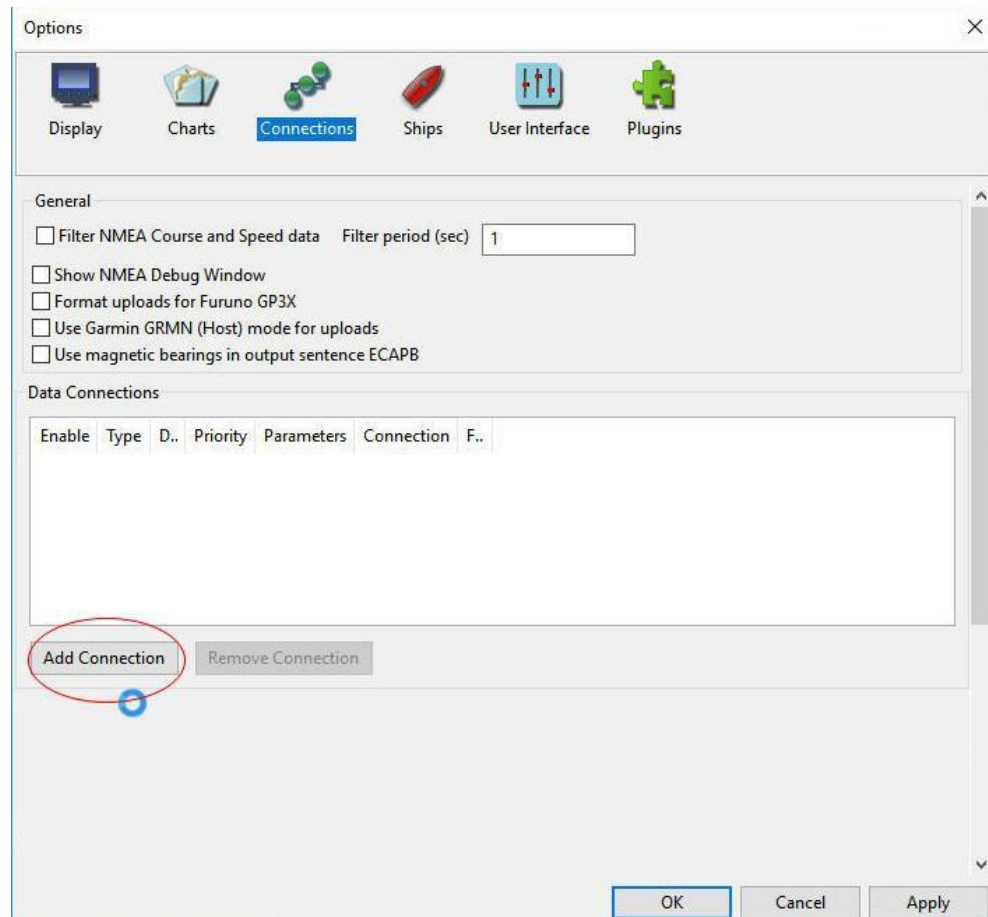
With the GPS installed in the computer's USB and receiving a position (Red LED is blinking)  
it's now time to connect it to OpenCPN

# PROGRAM SETTINGS

## GPS

Launch OpenCPN

In Options/Connections click on 'Add Connection',



# PROGRAM SETTINGS

Add Connection Remove Connection

Properties

☒ Serial ☐ Network

DataPort: COM1 Prolific USB-to-Serial Comm Port Baudrate: 4800

Protocol: NMEA 0183 Priority: 1

☒ Control checksum ☐ Use Garmin (GRMN) mode for input

OK Cancel Apply

Installed GPS  
highlighted text

Add Connection Remove Connection

Properties

☒ Serial ☐ Network

DataPort: COM3 Prolific USB-to-Serial Comm Port Baudrate: 4800

Protocol: NMEA 0183 Priority: 1

☒ Control checksum ☐ Use Garmin (GRMN) mode for input

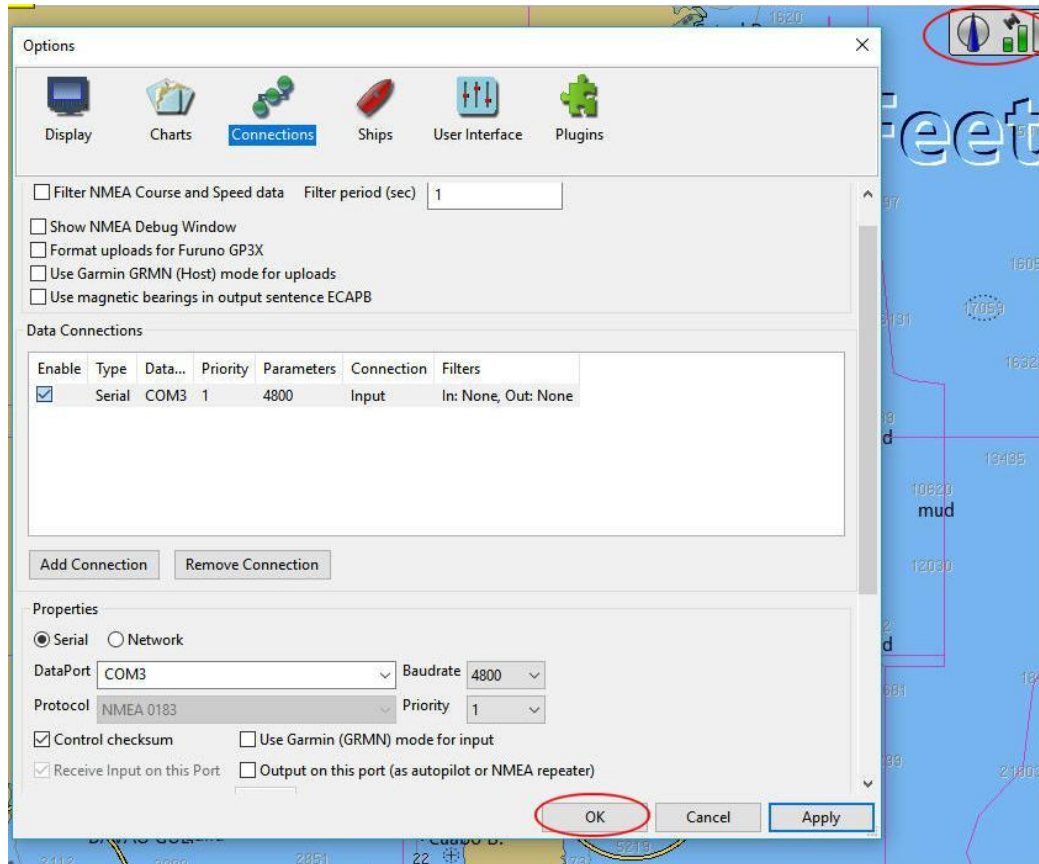
☒ Receive Input on this Port ☐ Output on this port (as autopilot or NMEA repeater)

OK Cancel Apply

# PROGRAM SETTINGS

## GPS

The Options screen shows that COM3 has been enabled and the green bars in the upper right hand corner show a position has been received





# PROGRAM SETTINGS

## GPS

As a further check you can select the 'Show NMEA Debug Window' box. The incoming NMEA data will scroll up the DeBug window.

The image shows two overlapping windows from a software application. The background window is the 'NMEA Debug Window', which displays a list of NMEA sentences received from a serial port (COM3). The sentences include \$GPRMC, \$GPGLA, \$GPGSA, \$GPGSV, and \$GPRMC. Below the list is a 'Filter' input field and a 'Legend' section with five colored boxes: green for 'Message accepted', orange for 'Input message filtered, output message filtered and dropped', purple for 'Input Message filtered and dropped', blue for 'Output Message', and red for 'Information Message or Message with errors'.

The foreground window is the 'Options' dialog box. It has a title bar with a close button. Below the title bar is a row of icons: Display, Charts, Connections (selected), Ships, User Interface, and Plugins. Below the icons are several checkboxes: 'Filter NMEA Course and Speed data' (unchecked), 'Show NMEA Debug Window' (checked and circled in red), 'Format uploads for Furuno GP3X' (unchecked), 'Use Garmin GRMN (Host) mode for uploads' (unchecked), and 'Use magnetic bearings in output sentence ECAPB' (unchecked). To the right of the 'Filter NMEA Course and Speed data' checkbox is a 'Filter period (sec)' input field with the value '1'. Below the checkboxes is a 'Data Connections' section with a table.

Enable	Type	Data...	Priority	Parameters	Connection	Filters
<input checked="" type="checkbox"/>	Serial	COM3	1	4800	Input	In: None, Out: None

# PROGRAM SETTINGS

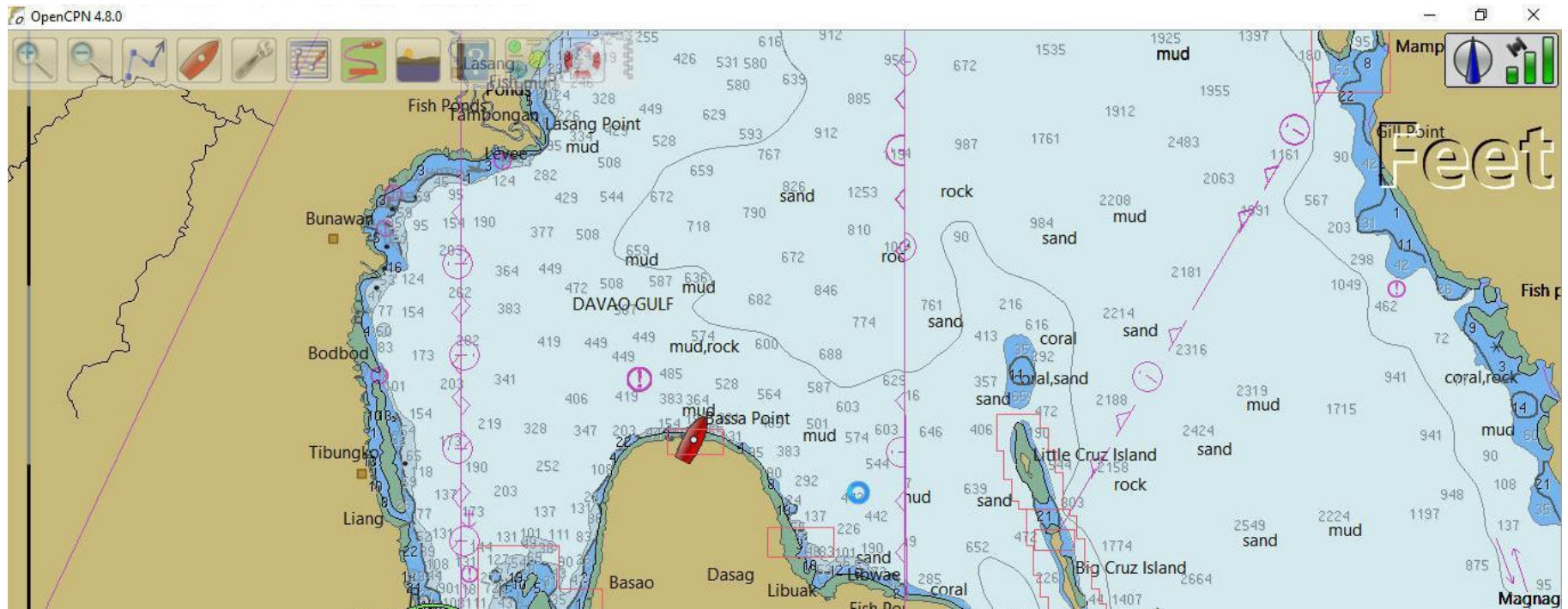
## GPS

Uncheck the 'Show NMEA Debug Window' box and click on 'OK' to return to the main OpenCPN screen. If the boat position is not shown and position information is OK (green bars), click on the red boat in the Tool Bar (Auto Follow) to center the boat on the screen.

# PROGRAM SETTINGS

## GPS

On the OpenCPN screen the GPS will be seen as green bars in the upper right hand corner and the boat icon will be red in color.



# PROGRAM SETTINGS

## GPS

### *How to make all COM Ports the same?*

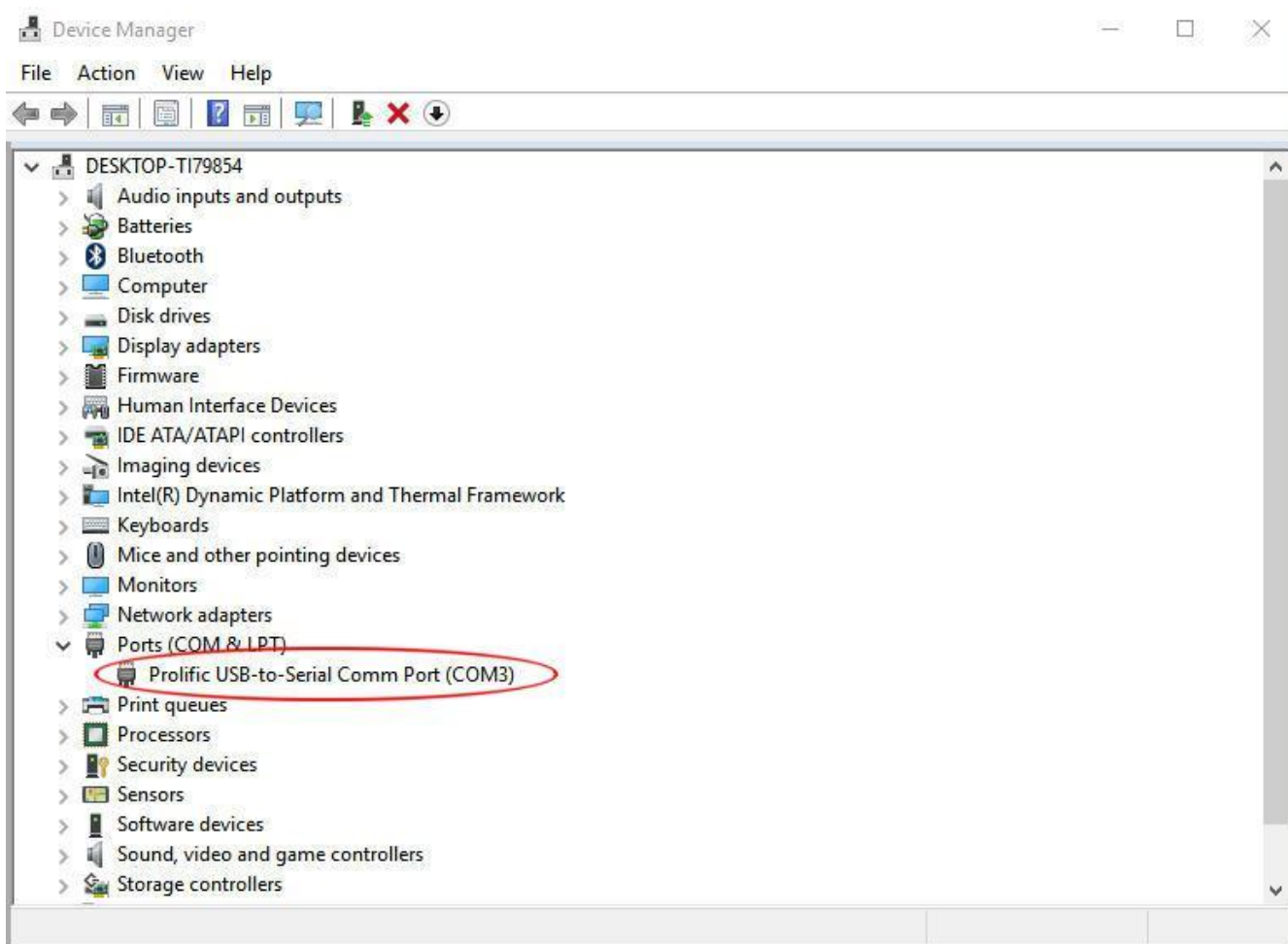
When the GPS is inserted into a USB port the computer assigns a COM port number based on some internal rules. With multiple USB ports the number can be different for each port used.

If, for convenience, you want a particular COM port number to be assigned and/or all USB ports to have the same number the **Device Manager** is used to make these assignments.

# PROGRAM SETTINGS

## GPS

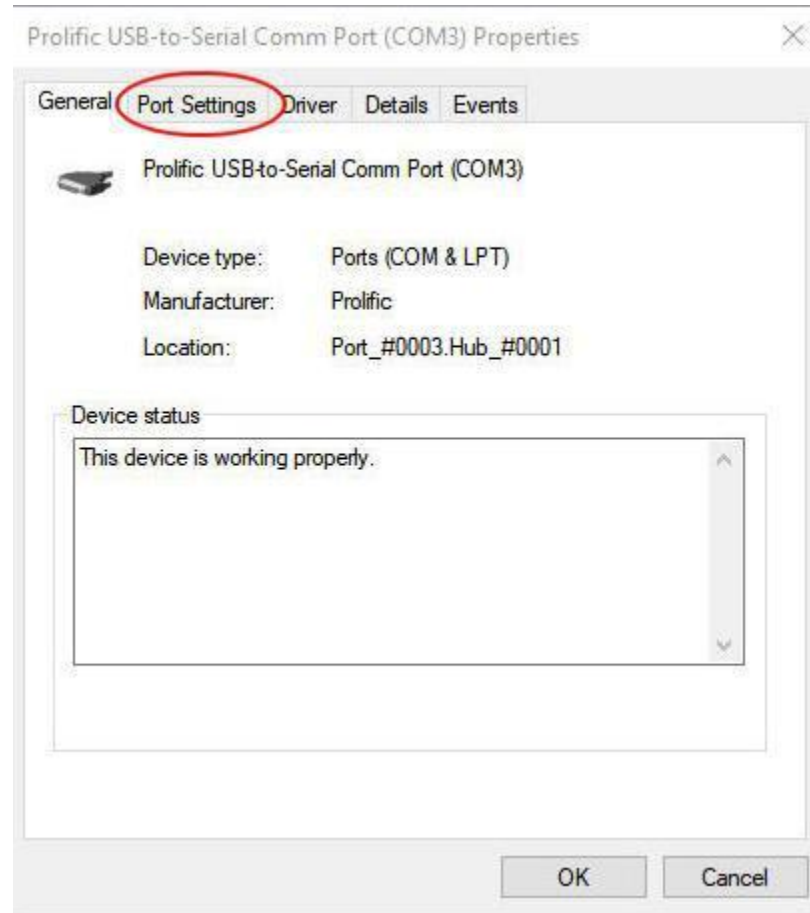
Display the COM port assignment and right-click on it.



# PROGRAM SETTINGS

## GPS

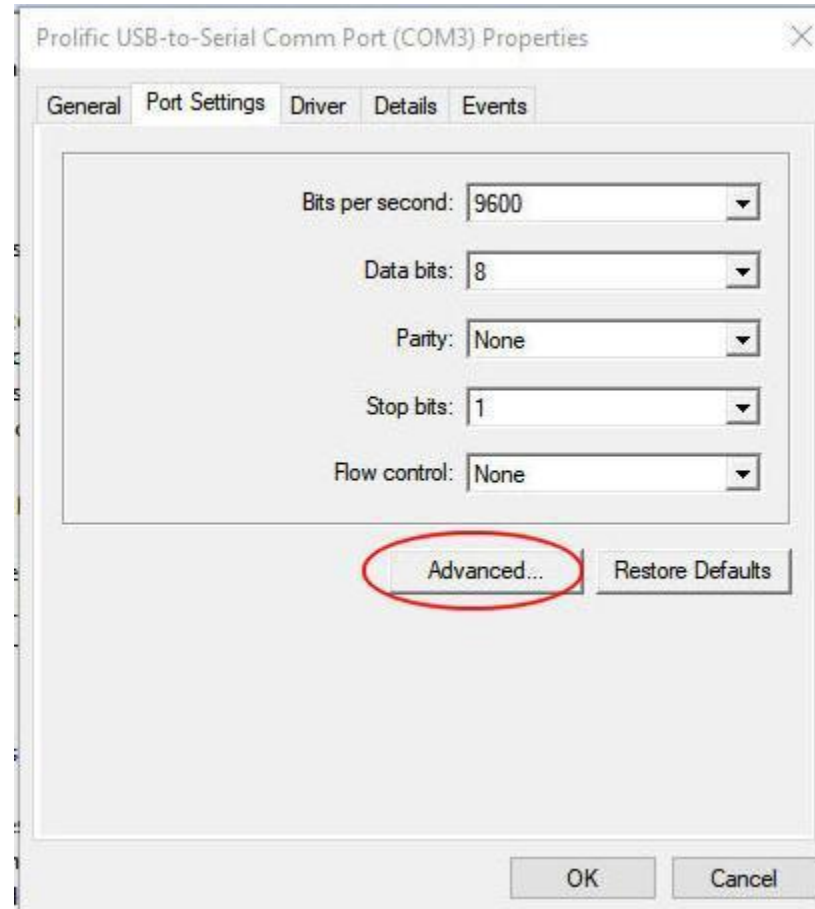
Click on the 'Port Settings' tab.



# PROGRAM SETTINGS

## GPS

Click on the 'Advanced' button

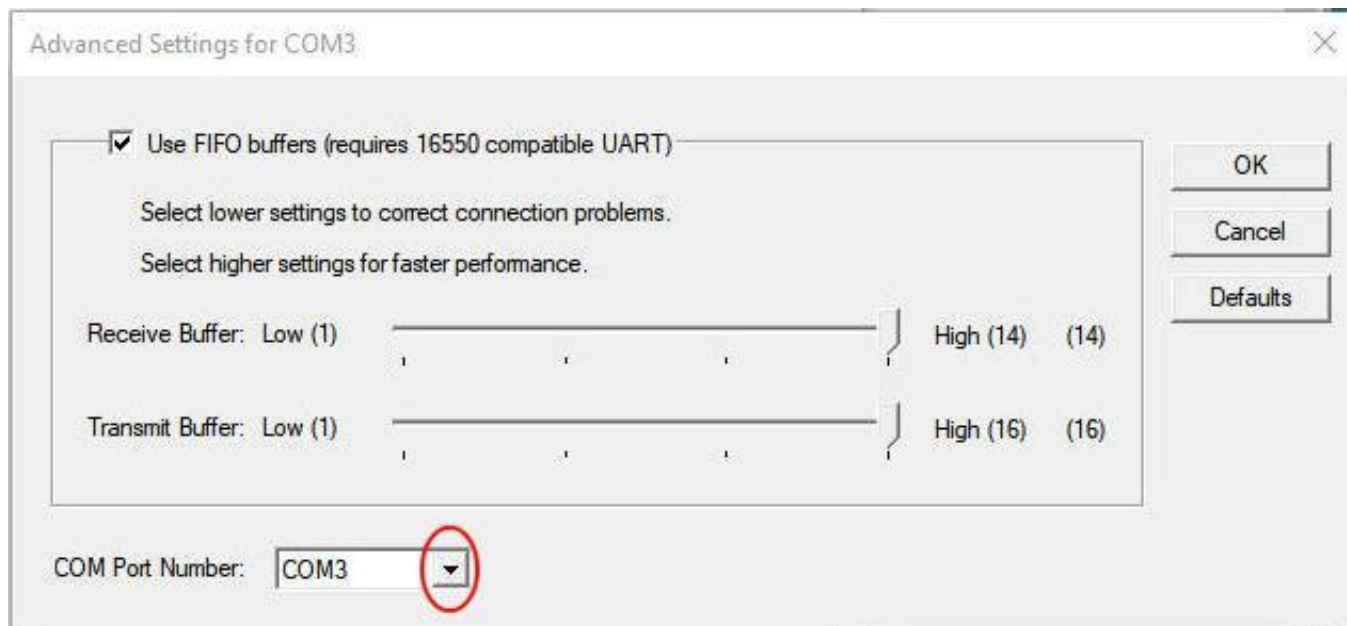




# PROGRAM SETTINGS

## GPS

Click on the 'COM Port Number' elevator



# PROGRAM SETTINGS

## GPS

From the elevator select the desired COM port number (in this case COM1) and click 'OK'

Advanced Settings for COM3

☒ Use FIFO buffers (requires 16550 compatible UART)

Select lower settings to correct connection problems.  
Select higher settings for faster performance.

Receive Buffer: Low (1) High (14) (14)

Transmit Buffer: Low (1) High (16) (16)

COM Port Number: COM1

OK  
Cancel  
Defaults

# PROGRAM SETTINGS

## GPS

If for convenience you want all USB ports to be the same COM port number, repeat the above for each of the other USB ports. Since you have assigned COM1 to the first USB port you will get this error message. At each instance click on 'Yes'



# PROGRAM SETTINGS

## Vector Charts

These are the settings I use.

Play with them to get the display you prefer.

The screenshot shows the 'Options' dialog box for 'Vector Charts'. The 'Charts' tab is selected in the top toolbar. The 'Vector Chart Display' sub-tab is active. The 'Display Category' is set to 'All'. Under 'Display', 'Depth Soundings' is checked. Under 'Buoys/Lights', 'Buoy/Light Labels', 'Light Descriptions', and 'Extended Light Sectors' are checked. Under 'Chart Texts', 'National text on chart', 'Important Text Only', and 'De-Cluttered Text' are unchecked. Under 'Chart Detail', 'Reduced Detail at Small Scale' is unchecked. 'Graphics Style' is set to 'Paper Chart', 'Boundaries' to 'Symbolized', and 'Colors' to '4 Color'. Depth settings are: Shallow Depth 8 feet, Safety Depth 15 feet, and Deep Depth 100 feet. The 'CM93 Detail Level' slider is set to 5. On the right, the 'Mariner's Standard' list has 'Bridge' checked. At the bottom right are 'OK', 'Cancel', and 'Apply' buttons.

Options

Display Charts Connections Ships User Interface Plugins

Chart Files Vector Chart Display Chart Groups Tides & Currents

Display Category All

Display ☒ Depth Soundings  
☐ Chart Information Objects

Buoys/Lights ☐ Buoy/Light Labels  
☐ Light Descriptions  
☒ Extended Light Sectors

Chart Texts ☐ National text on chart  
☐ Important Text Only  
☐ De-Cluttered Text

Chart Detail ☐ Reduced Detail at Small Scale

Graphics Style Paper Chart

Boundaries Symbolized

Colors 4 Color

Shallow Depth 8 feet

Safety Depth 15 feet

Deep Depth 100 feet

CM93 Detail Level -5 5

Mariner's Standard

- ☐ Administration area (Named)
- ☐ Airport / airfield
- ☐ Anchor berth
- ☐ Anchor
- ☐ Anchorage area
- ☐ Beacon cardinal
- ☐ Beacon isolated danger
- ☐ Beacon lateral
- ☐ Beacon safe water
- ☐ Beacon special purpose/general
- ☐ Berth
- ☒ Bridge
- ☐ Building single
- ☐ Building religious
- ☐ Built-up area
- ☐ Buoy cardinal
- ☐ Buoy installation
- ☐ Buoy isolated danger
- ☐ Buoy lateral
- ☐ Buoy safe water
- ☐ Buoy special purpose/general

Select All Clear All

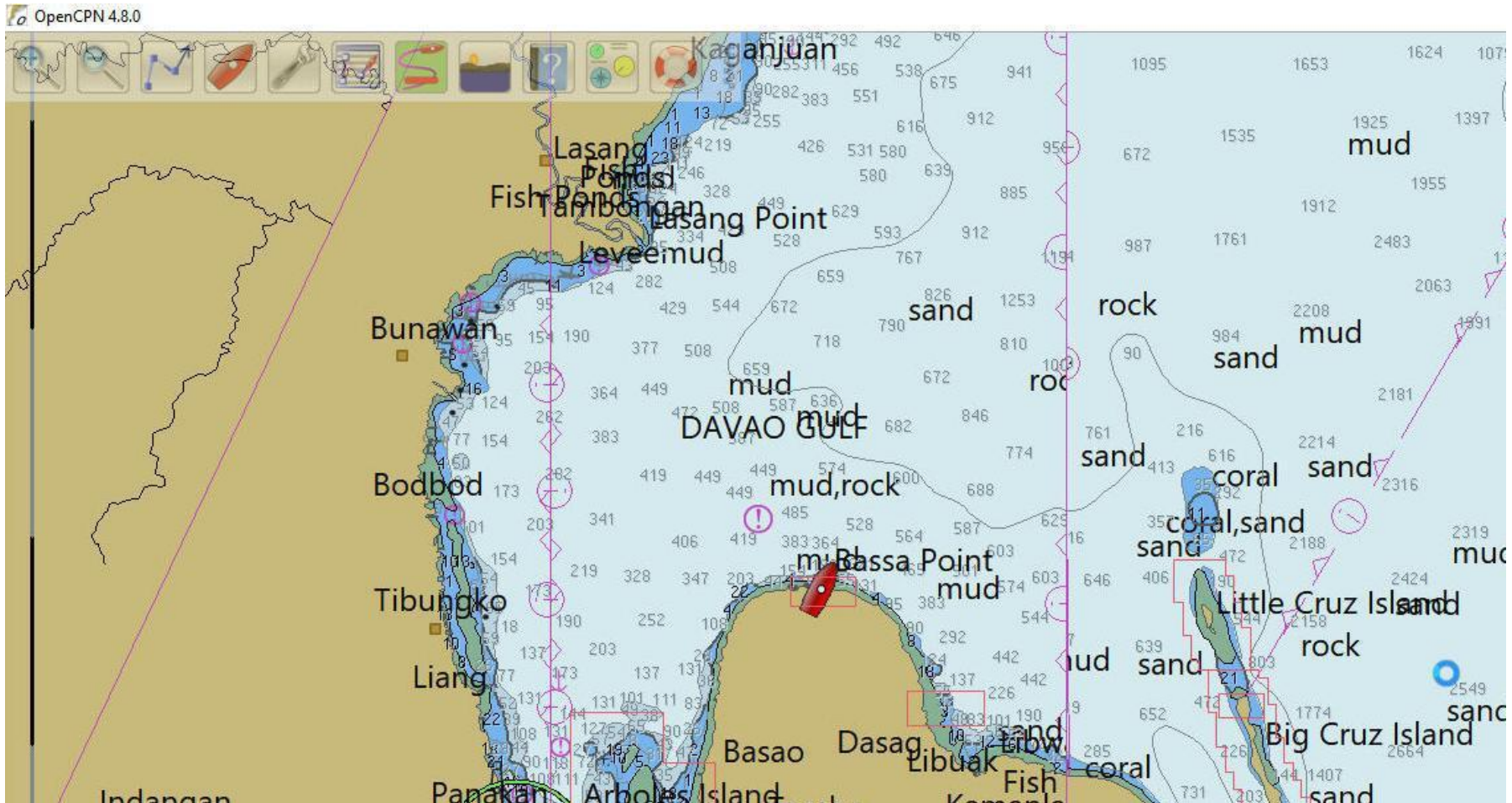
Reset to STANDARD

OK Cancel Apply

# PROGRAM SETTINGS

## Language/Fonts

When OpenCPN is installed on computers with smaller screens such as netbooks, the font on the screen may be large.





# PROGRAM SETTINGS

## Language/Fonts

A way to change to fonts that are designed for these small machines is to install in the **Windows Fonts** folder a set of fonts titled 'Droid Sans'. These fonts can be downloaded from:

<http://www.fontsquirrel.com/fonts/Droid-Sans>

CLICK ON 'Download TTF'

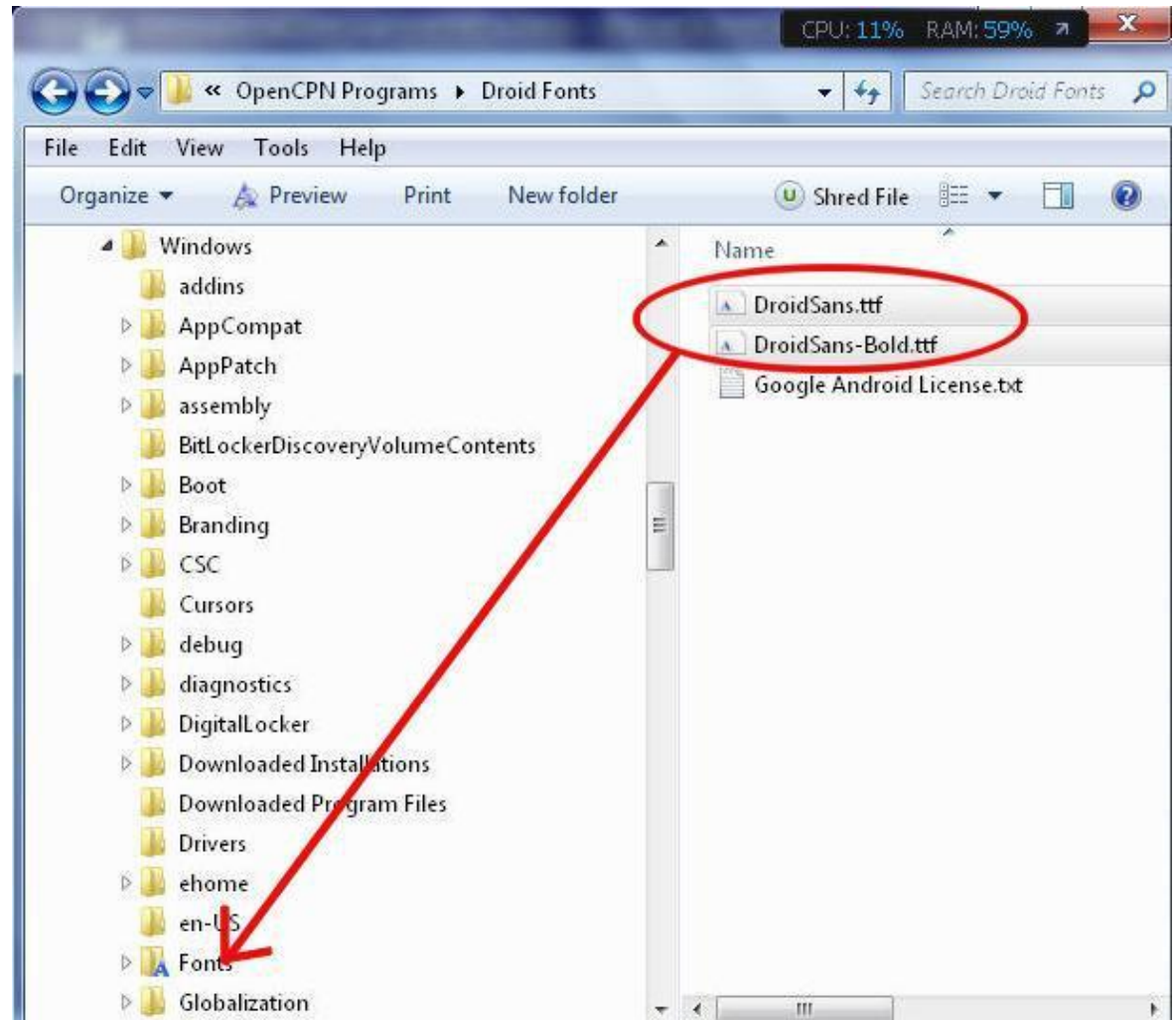


# PROGRAM SETTINGS

## Language/Fonts

After downloading the font file, unzip it to any convenient folder.

Drag and drop (or cut and Paste) the two '.ttf' files into the **Windows Fonts** folder.





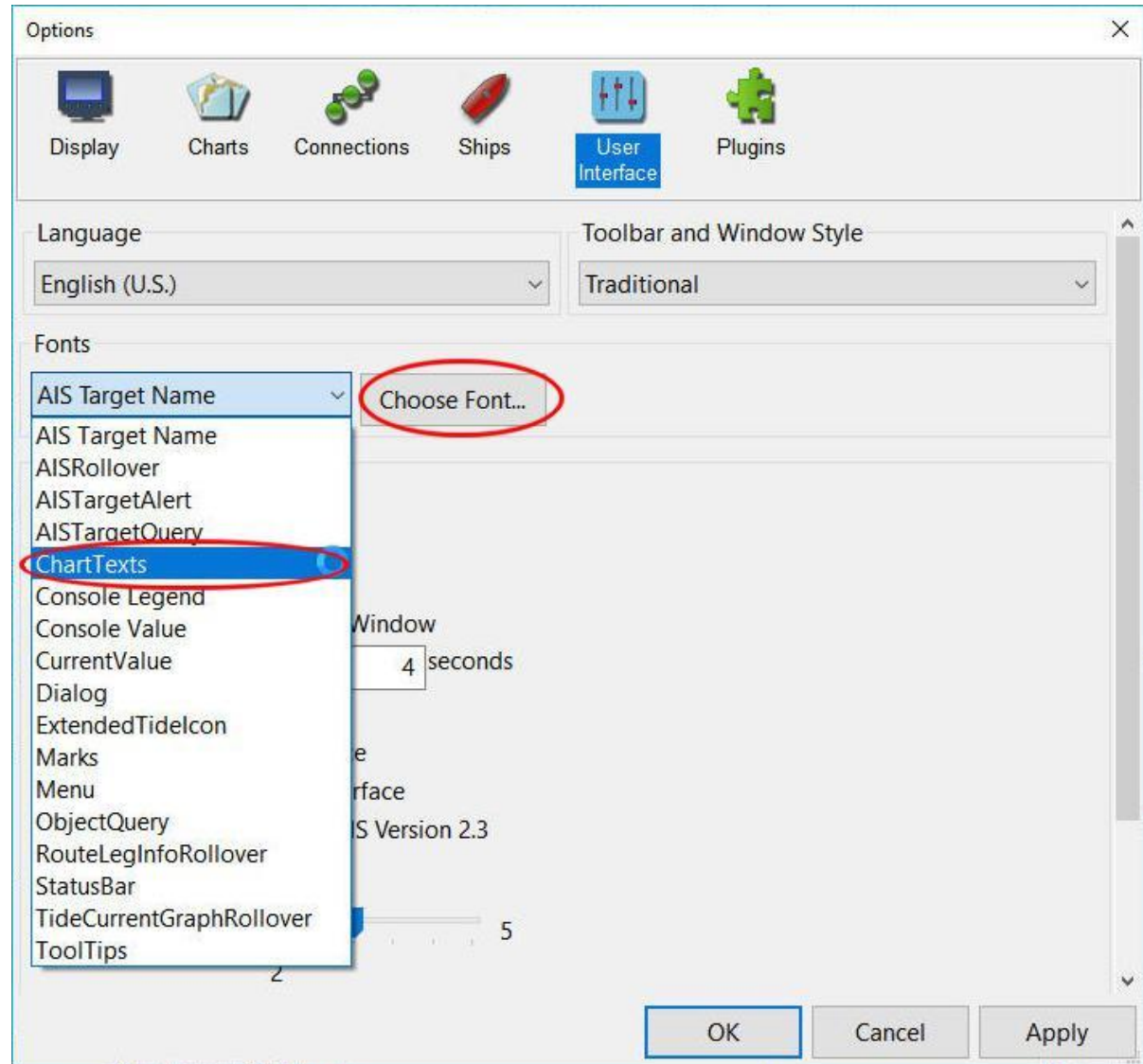
# PROGRAM SETTINGS

## Language/Fonts

Go to the  
'Options/User  
Interface' page.

On the elevator  
under 'Fonts',  
select 'Chart Texts'

Then click on  
'Choose Font ...'

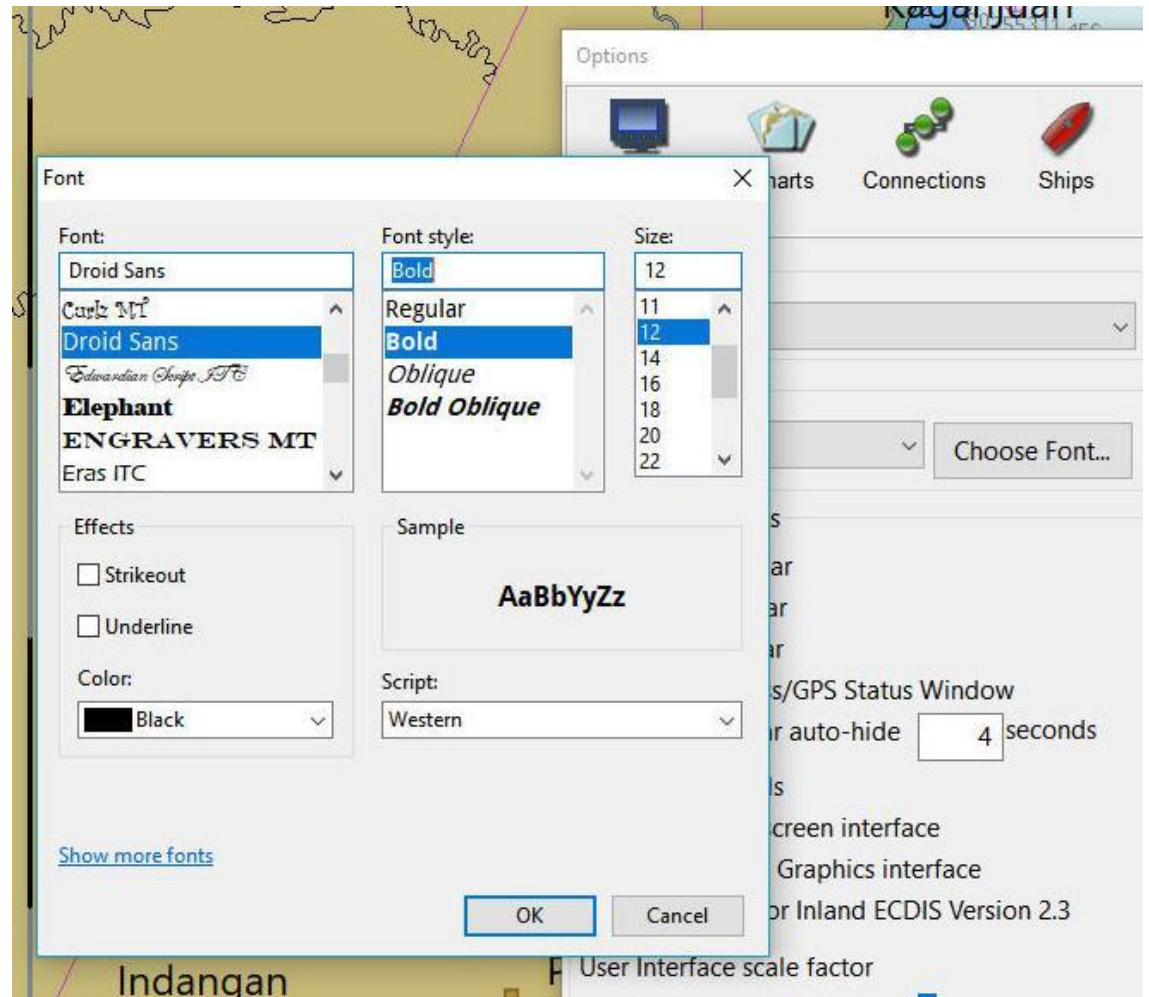


# PROGRAM SETTINGS

## Language/Fonts

This window appears.  
Make the selections as  
shown then click on 'OK'

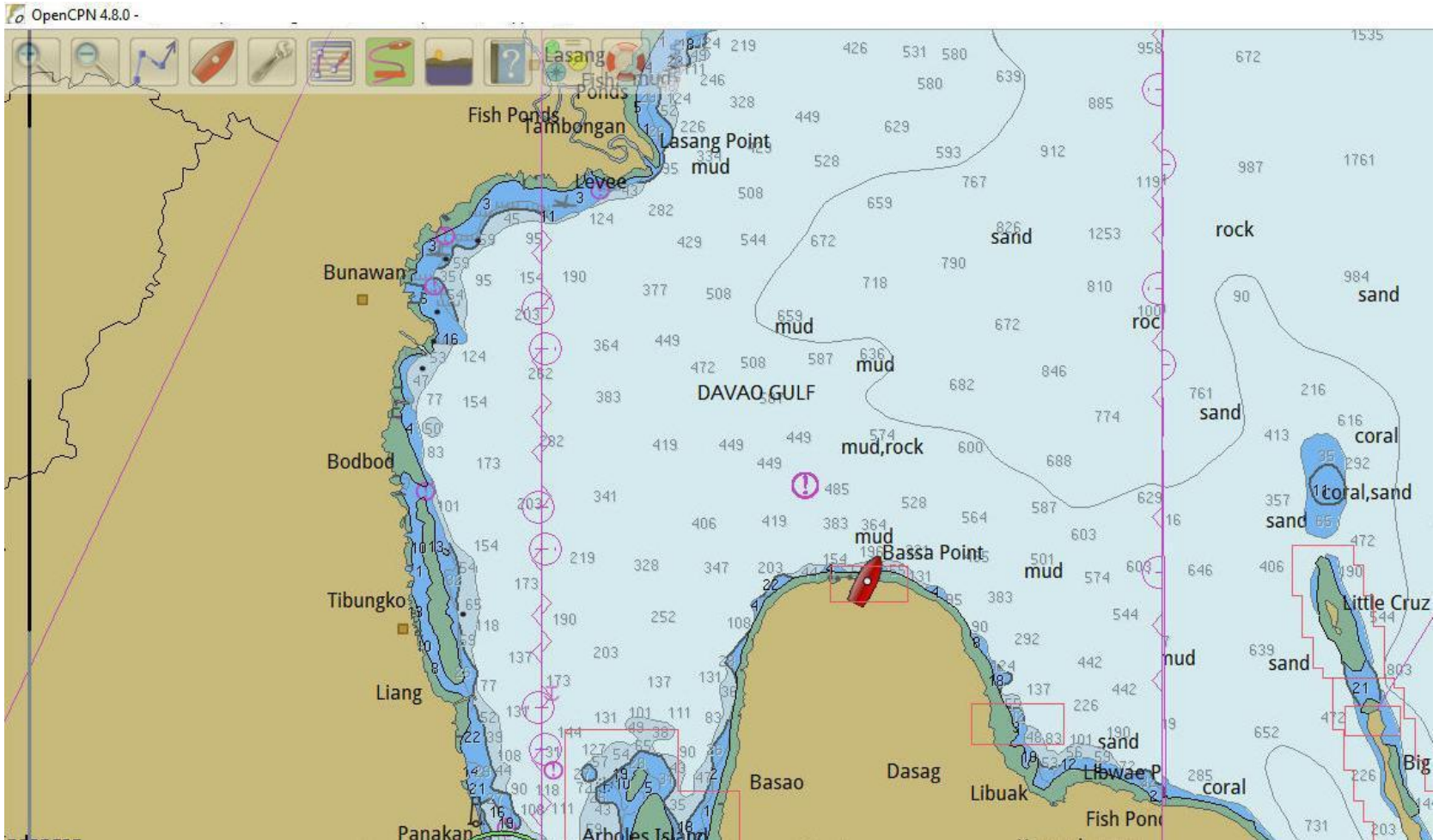
By trial and error find  
the font size you prefer.



# PROGRAM SETTINGS

## Language/Fonts

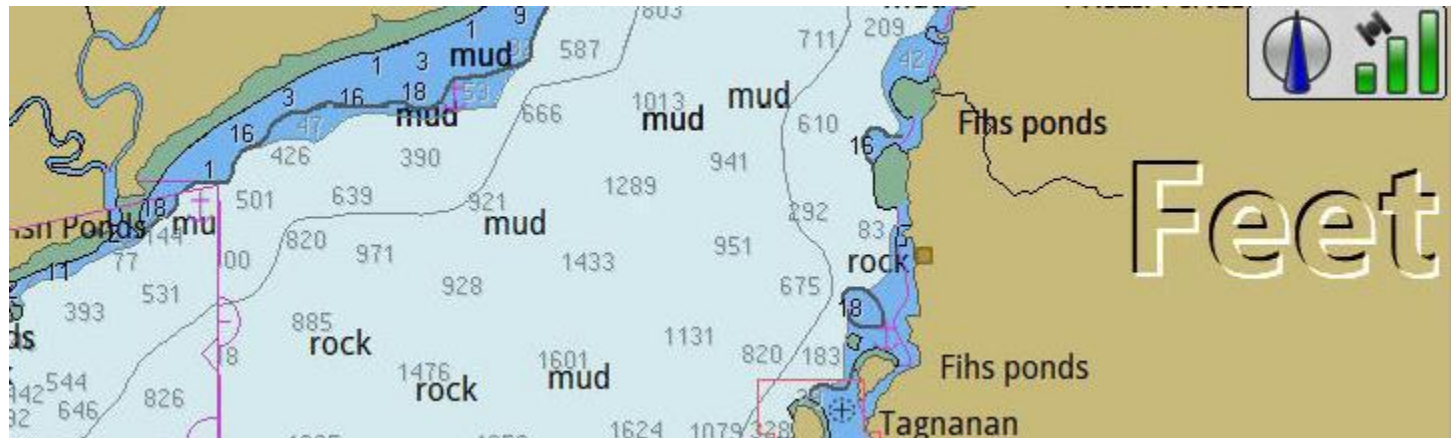
The smaller text is displayed. If you want other styles then repeat the above.



# PROGRAM SETTINGS

## Display Depth Units

My display shows soundings in feet.



I have chosen this unit since my depth sounder displays depths in feet. You have a choice of units to be displayed.

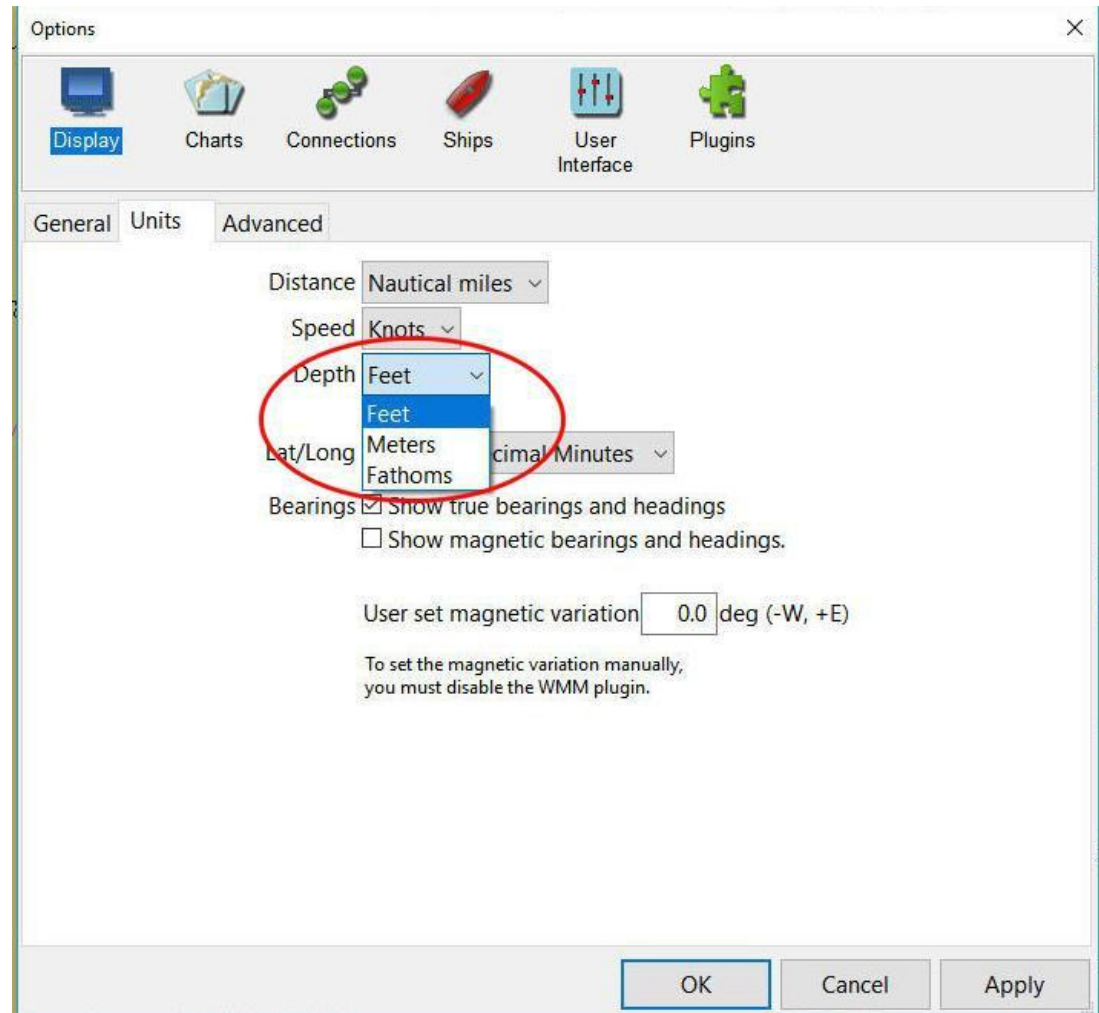
# PROGRAM SETTINGS

## Display Depth Units

Go to 'Options/Display' Units '

You have the choices as shown; Feet, Meters or fathoms.

Other units such as distance, speed and position can be changed here as well.





# PROGRAM SETTINGS

## Tool Bar Cleanup

When first installed the program has many Tool Bar icons.



The non-essential ones can be deleted to clean up the Tool Bar.

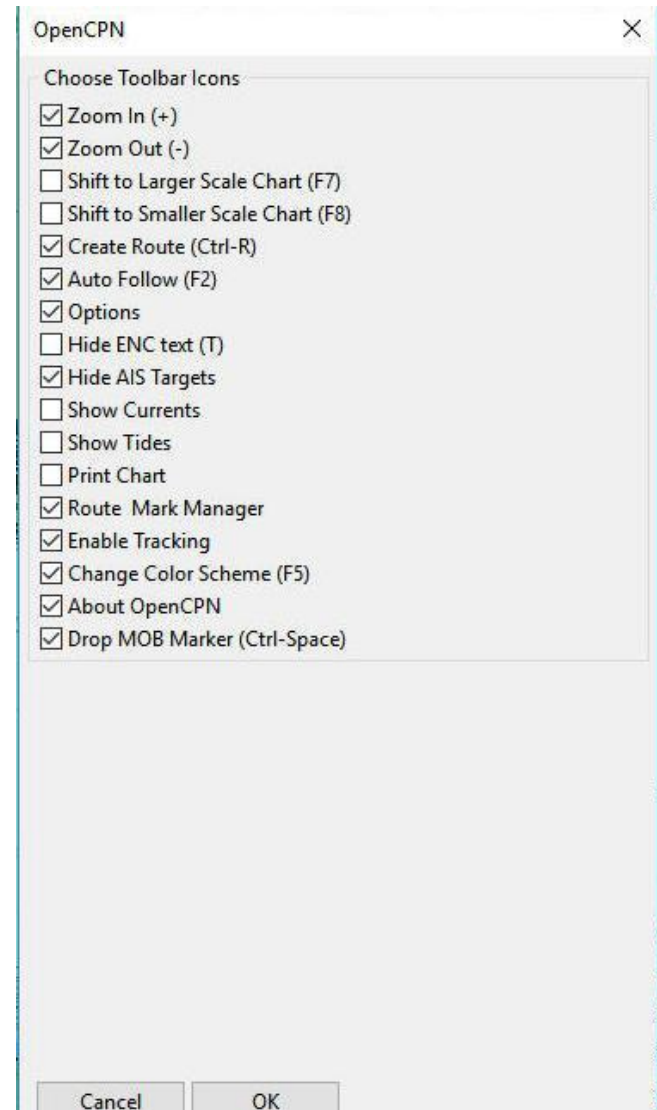
# PROGRAM SETTINGS

## Tool Bar Cleanup

Right-click on the Tool Bar to show this screen.

Uncheck the ones you don't want such as these ....

(No current nor tides information is available in my area and I've not found it necessary to print charts)





# PROGRAM SETTINGS

## Tool Bar Cleanup

This is my 'cleaned up' Tool Bar.



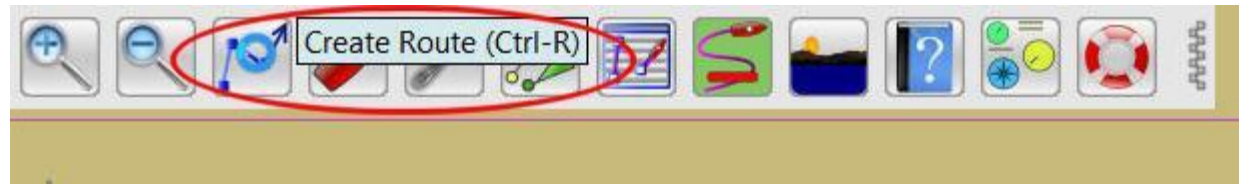
The text icon (A+) has been removed as the shortcut key 'T' toggles the display text on and off.

(And the shortcut key 'S' toggles soundings on and off)

# ROUTES

## Create a Route

Begin by selecting the 'Create Route' tool on the Tool Bar. (The shortcut is to hold down the 'CTL' key and press 'R'.



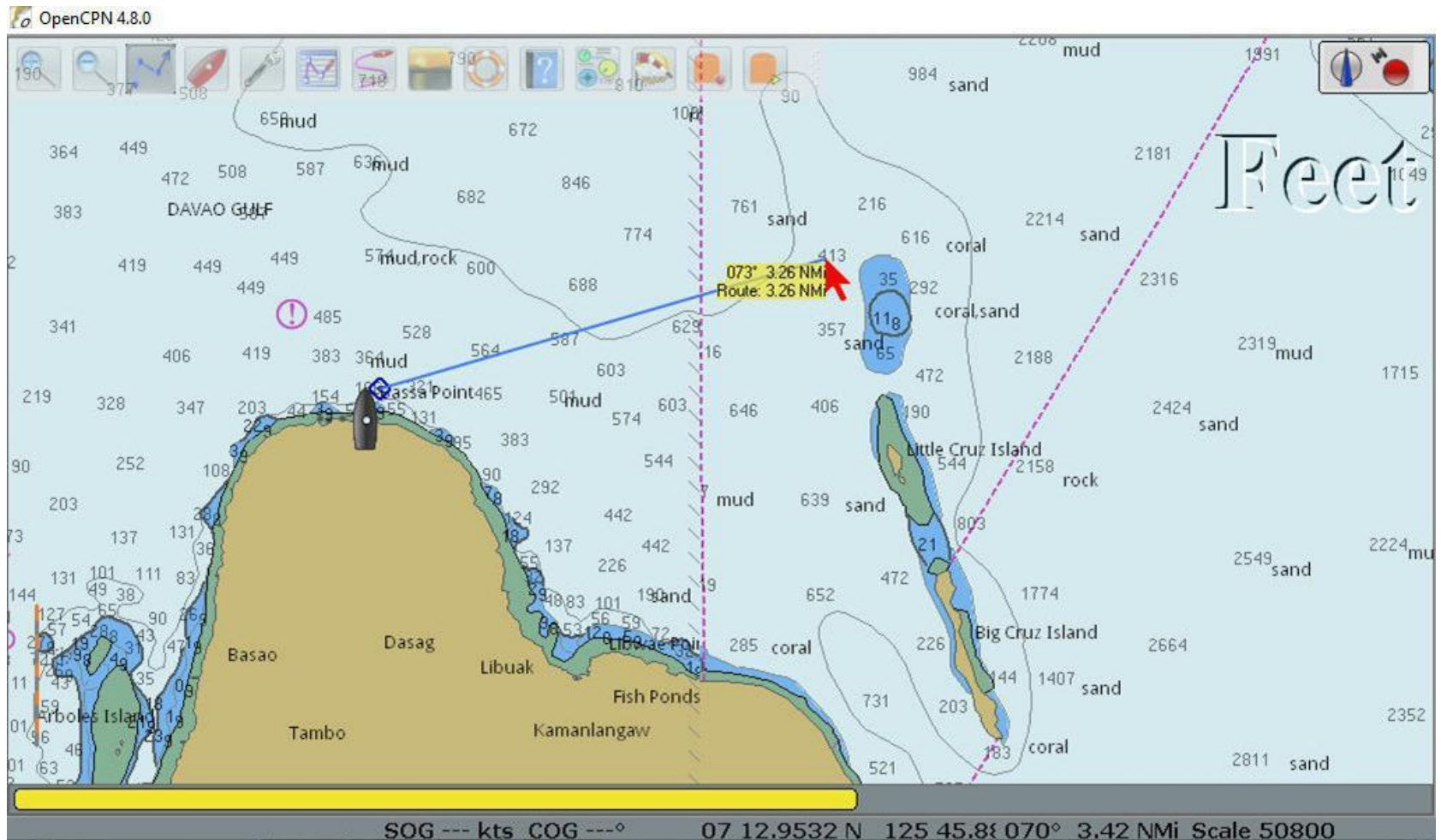
The cursor turns into a 'PENCIL' shape.



# ROUTES

## Create a Route

Click the 'pencil' pointer at desired locations to describe a route.

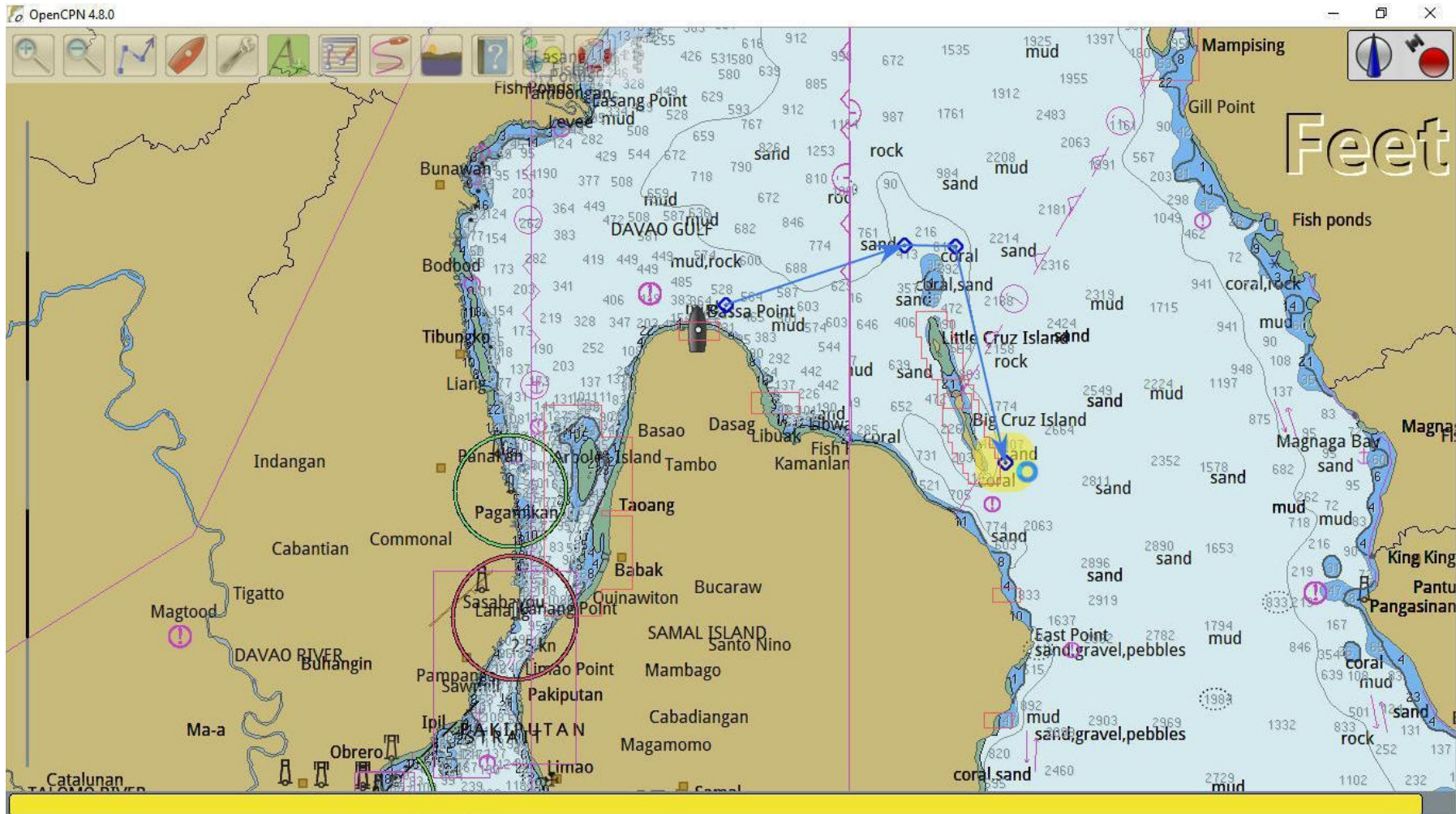




# ROUTES

## Create a Route

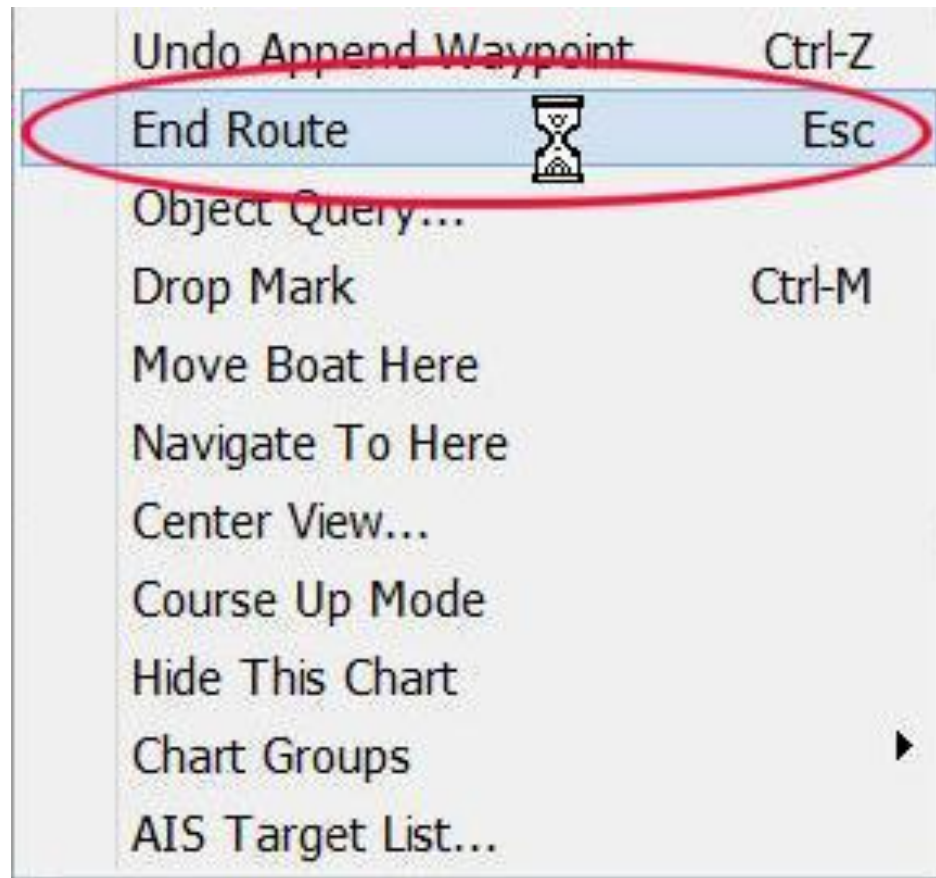
Continue dropping waypoints until the route has been completed then press the 'Esc' key to stop.



# ROUTES

## Create a Route

An alternate way to stop creating a route is to right-click on the screen and select 'End Route'. Note the shortcut is the 'Esc' key.



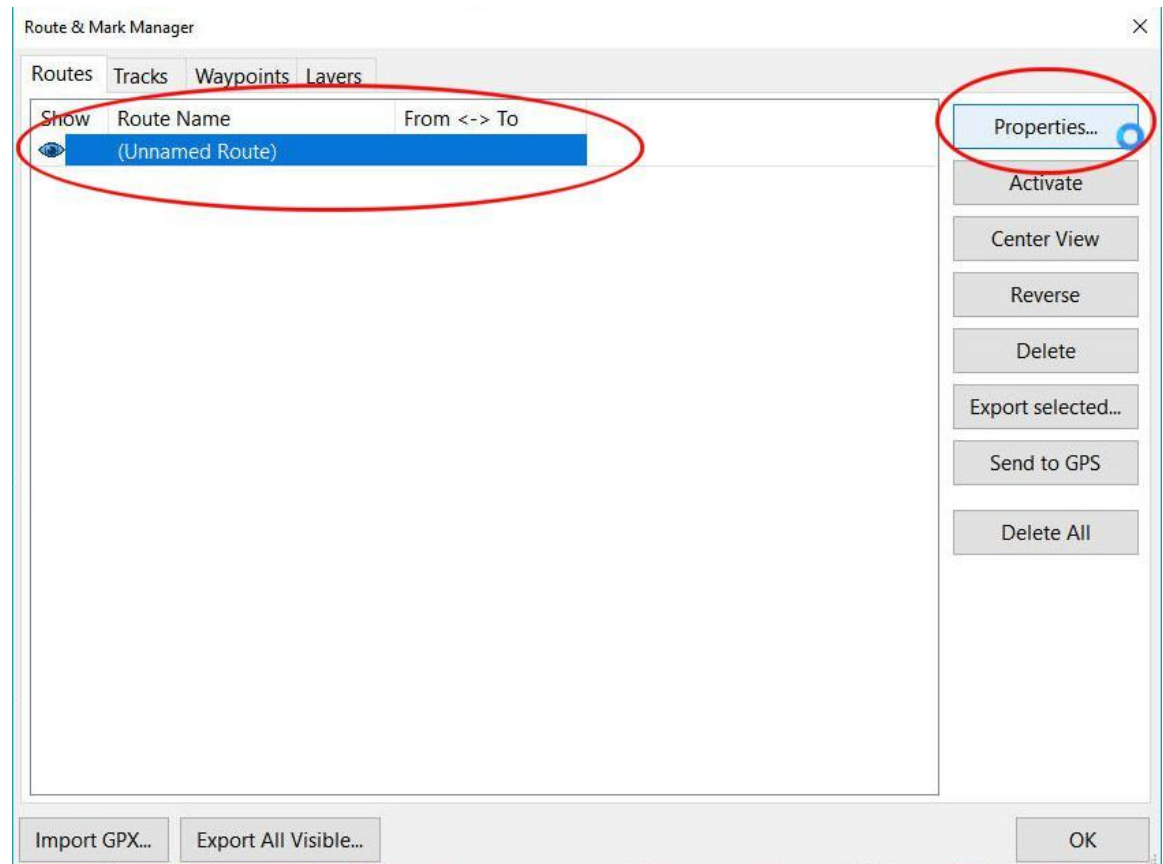
# ROUTES

## Create a Route

Open the 'Route & Mark Manager' from the Tool Bar.



On the 'Routes' tab select the new (Unnamed Route) then click on 'Properties'



# ROUTES

## Create a Route

Here you can give the route a name (e.g. SAMPLE ROUTE).  
The route properties such as the length of the route and waypoint details are presented here.

Route Properties

Properties

Name  
SAMPLE ROUTE

Depart From  
Destination

Total distance  
7.21 NMi

Plan speed  
6.00

Time enroute  
01 Hours 12 Minutes

Departure Time (m/d/y h:m)

Time shown as  
☐ UTC ☒ Local @ PC ☐ LMT @ Location

Color: Default color

Style: Default

Width: Default

Waypoints

L.	To Waypoint	Distance	Bearing	Latitude	Longitude	ETE	Speed	Next tide e...	Description	Co
---	001	0.58 NMi	048 Deg. T	07 12.2 N	125 43.1 E	Start	6.00			072
1	002	2.95 NMi	072 Deg. T	07 13.1 N	125 45.9 E	00 H 29 M	6.00			091
2	003	0.80 NMi	091 Deg. T	07 13.1 N	125 46.7 E	00 H 37 M	6.00			167
3	004	3.45 NMi	167 Deg. T	07 09.7 N	125 47.4 E	01 H 12 M	6.00			

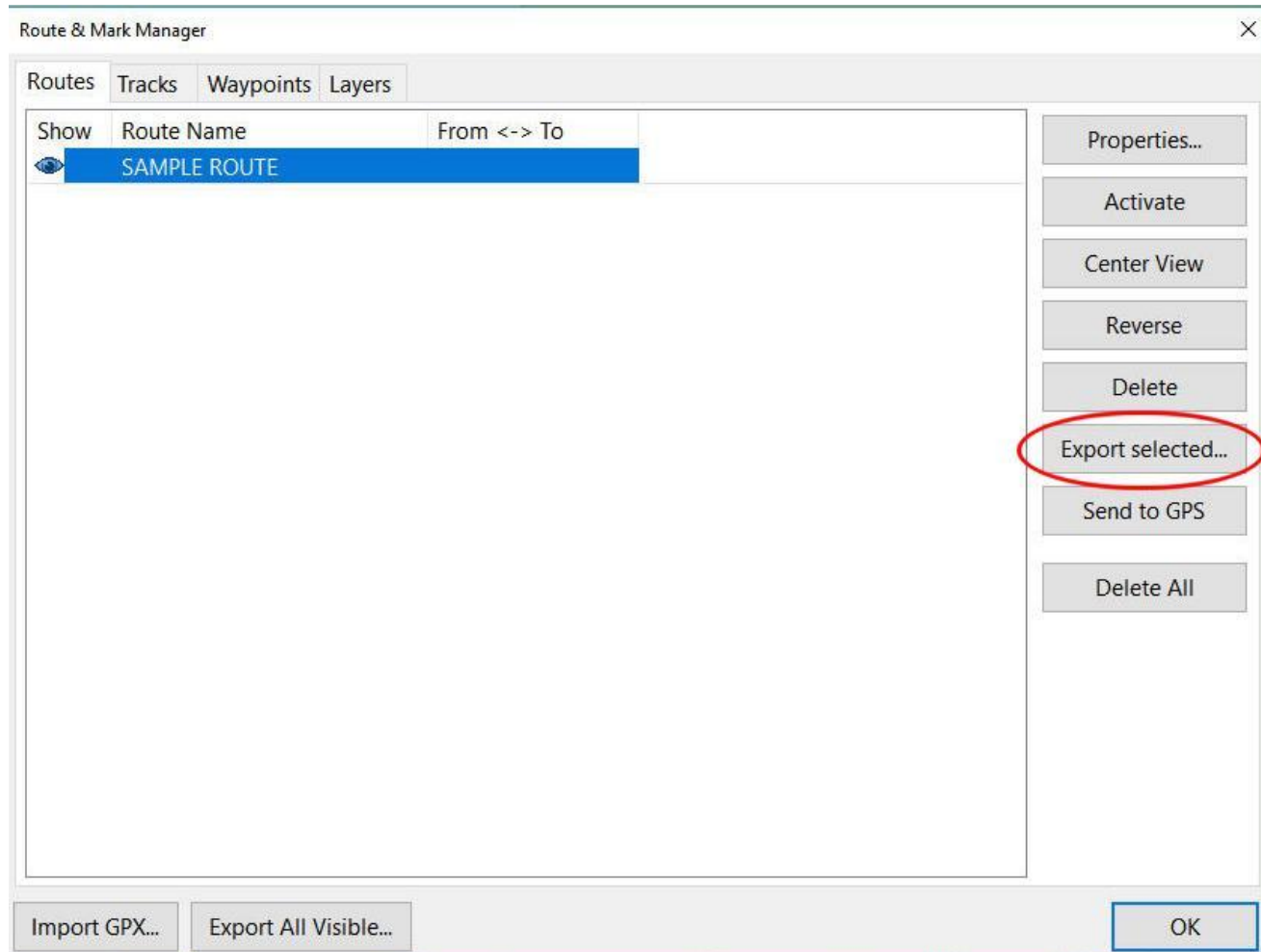
Print Route Extend Route Split Route Cancel OK



# ROUTES

## Save a Route

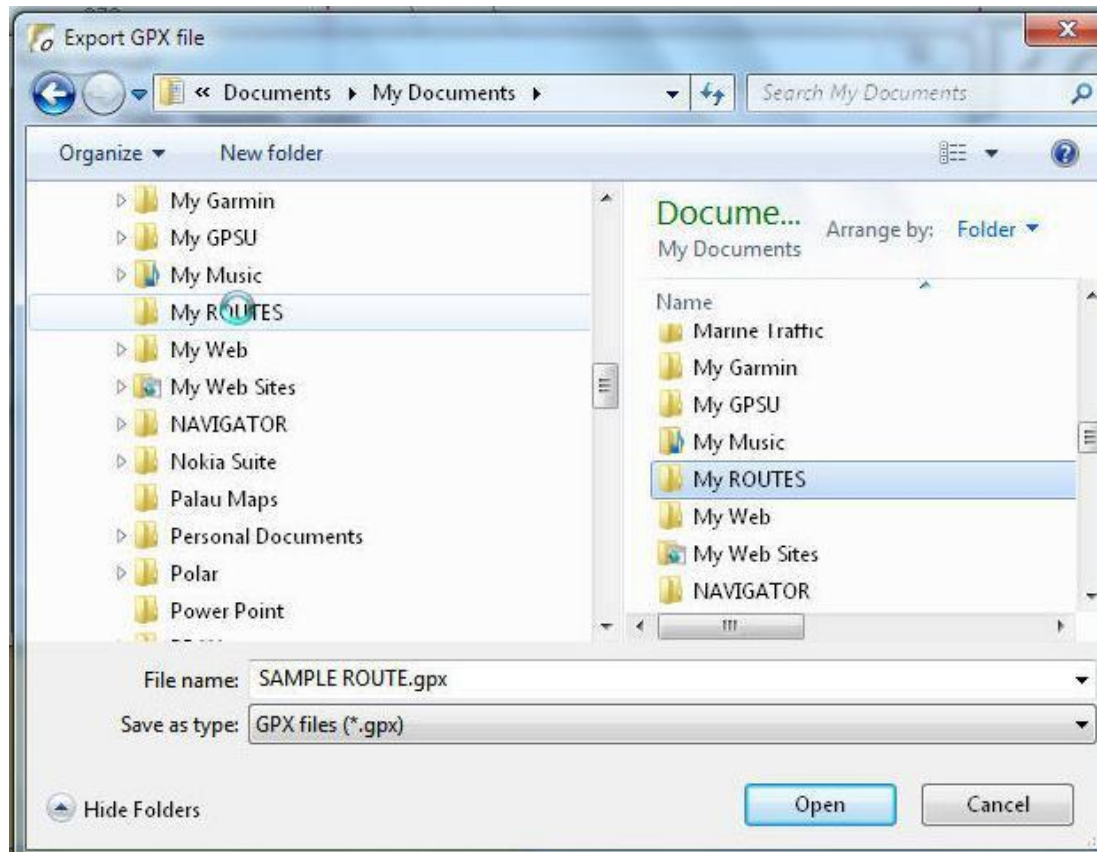
To save the route for future reference go to the 'Route & Mark Manager'. Select the route and click on 'Export selected ...'.



# ROUTES

## Save a Route

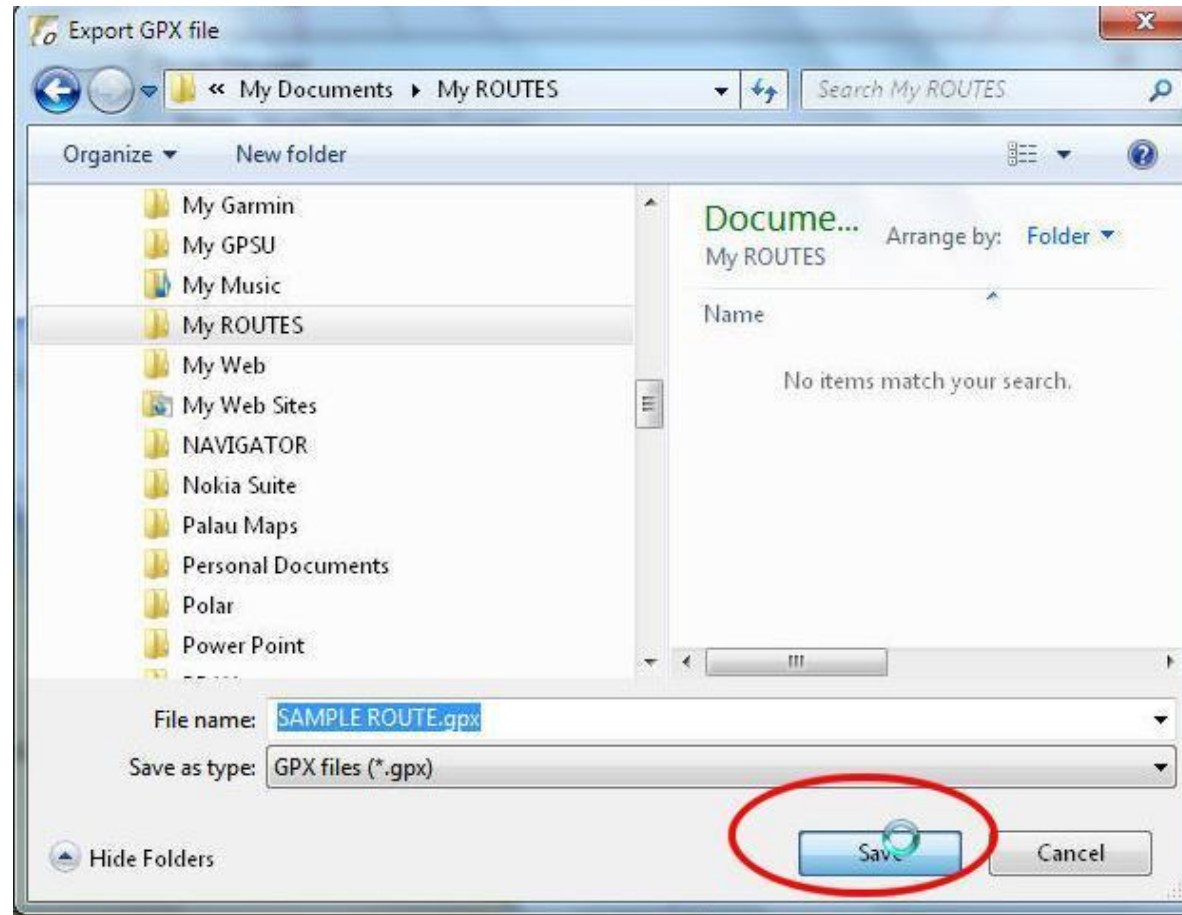
Navigate to where you save your routes (e.g. such as My Routes under My Documents) and open the folder.



# ROUTES

## Save a Route

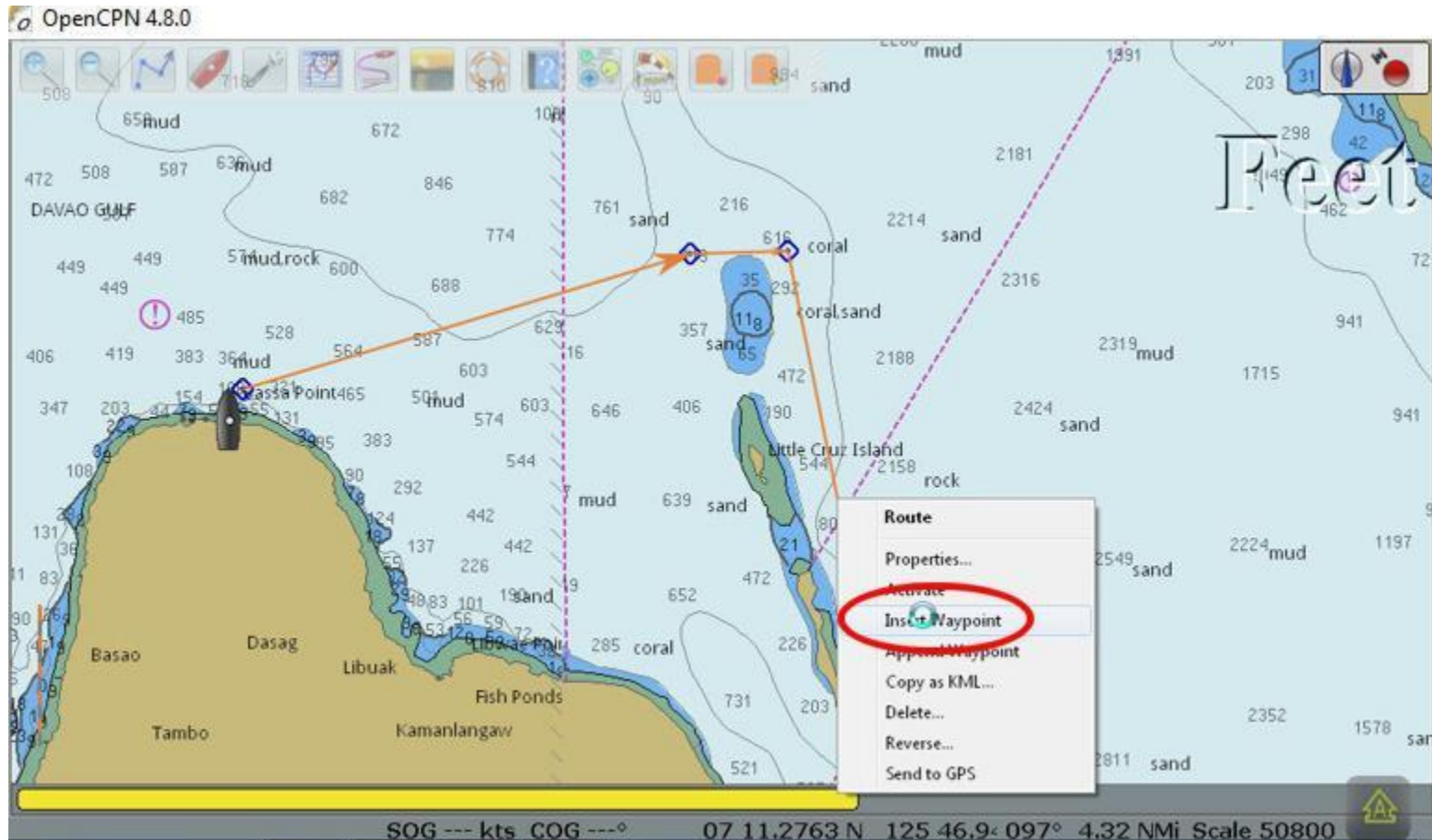
Click on 'Save' and the route is saved to the hard drive.



# ROUTES

## Change a Route

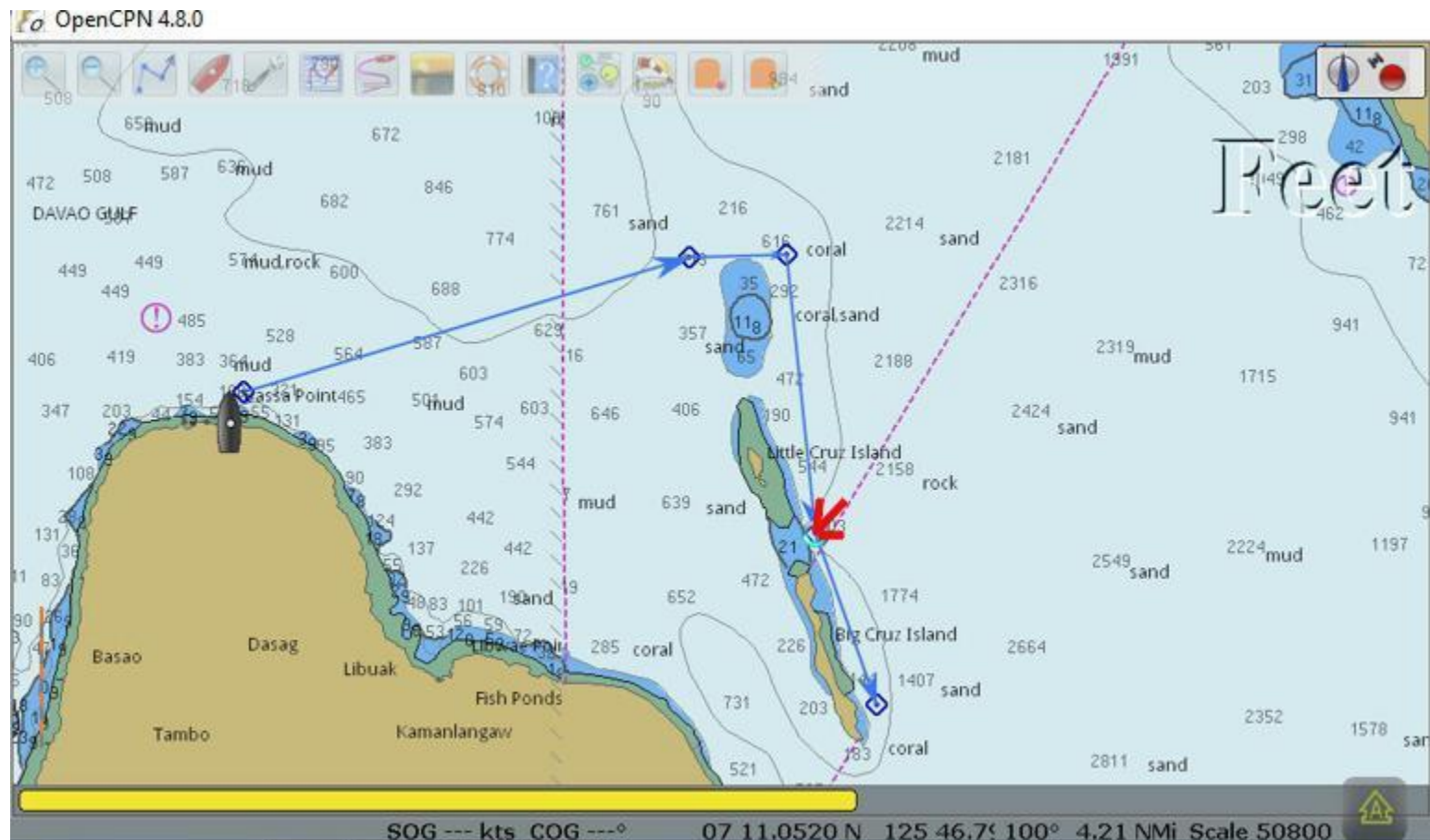
To make changes to a route, right-click on the route and click on 'Insert waypoint'



# ROUTES

## Change a Route

Place the cursor on the newly created waypoint and move it to the desired location (But .....)





# ROUTES

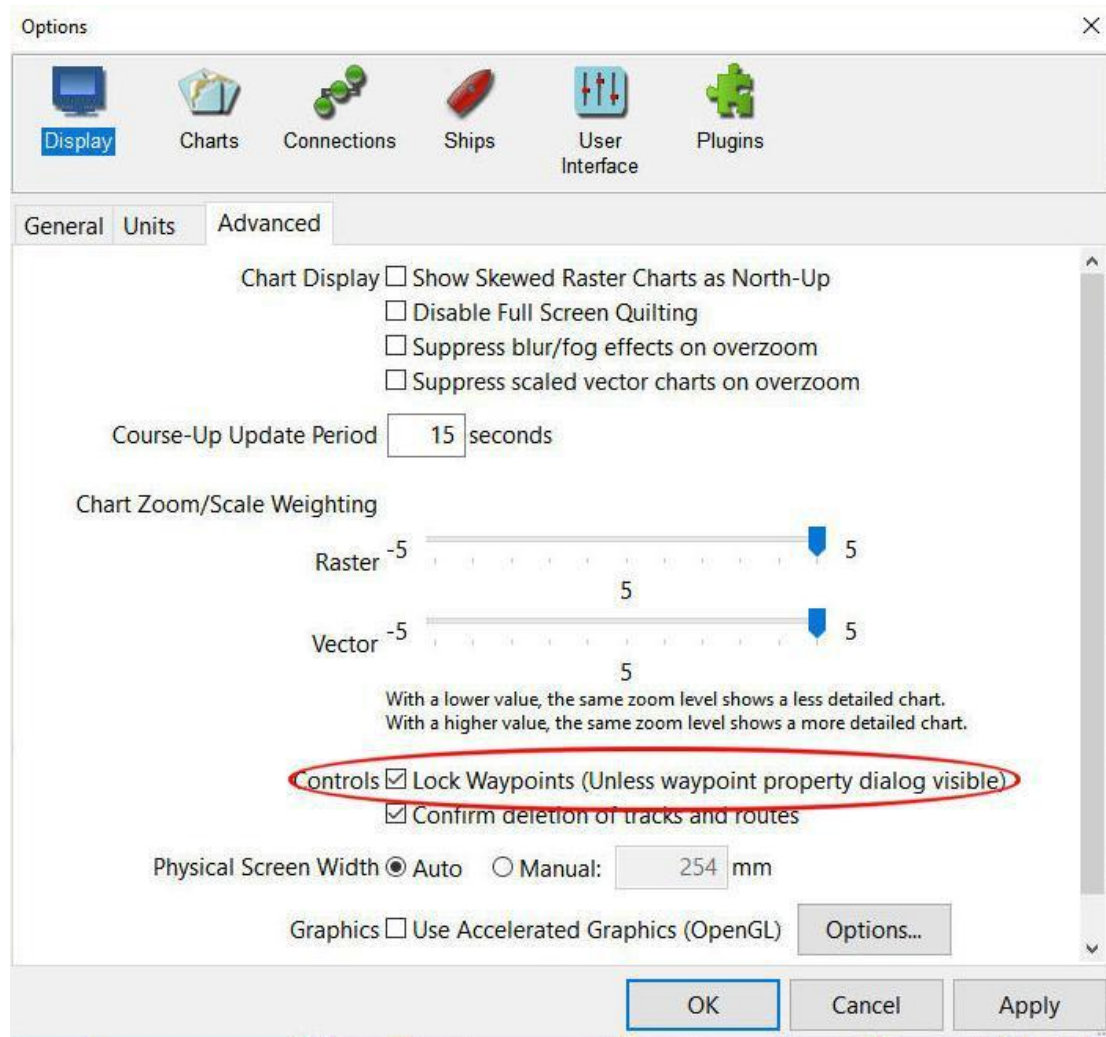
## Change a Route

It may happen that you cannot move a waypoint on the newly created route.

This is because all waypoints have been 'LOCKED'

Go to 'Options/Display/Advanced' AND **UNCHECK** the box 'Lock Waypoints...'

(More discussion on this later)



# ROUTES

## Change a Route

Displaying the 'Route Properties' shows the changes to the route. Longer distance and the new waypoint that was added.

Route Properties

Properties

Name  
SAMPLE ROUTE

Depart From  
Destination

Total distance  
7.38 NMi

Plan speed  
6.00

Time enroute  
01 Hours 13 Minutes

Departure Time (m/d/y h:m)

Time shown as  
☐ UTC ☒ Local @ PC ☐ LMT @ Location

Color: Default color Style: Default Width: Default

Waypoints

L.	To Waypoint	Distance	Bearing	Latitude	Longitude	ETE	Speed	Next tide e...	Description	Co
---	001	0.58 NMi	048 Deg. T	07 12.2 N	125 43.1 E	Start	6.00			072
1	002	2.95 NMi	072 Deg. T	07 13.1 N	125 45.9 E	00 H 29 M	6.00			091
2	003	0.80 NMi	091 Deg. T	07 13.1 N	125 46.7 E	00 H 37 M	6.00			186
3	NM001	1.06 NMi	186 Deg. T	07 12.1 N	125 46.6 E	00 H 48 M	6.00			161
4	004	2.56 NMi	161 Deg. T	07 09.6 N	125 47.4 E	01 H 13 M	6.00			

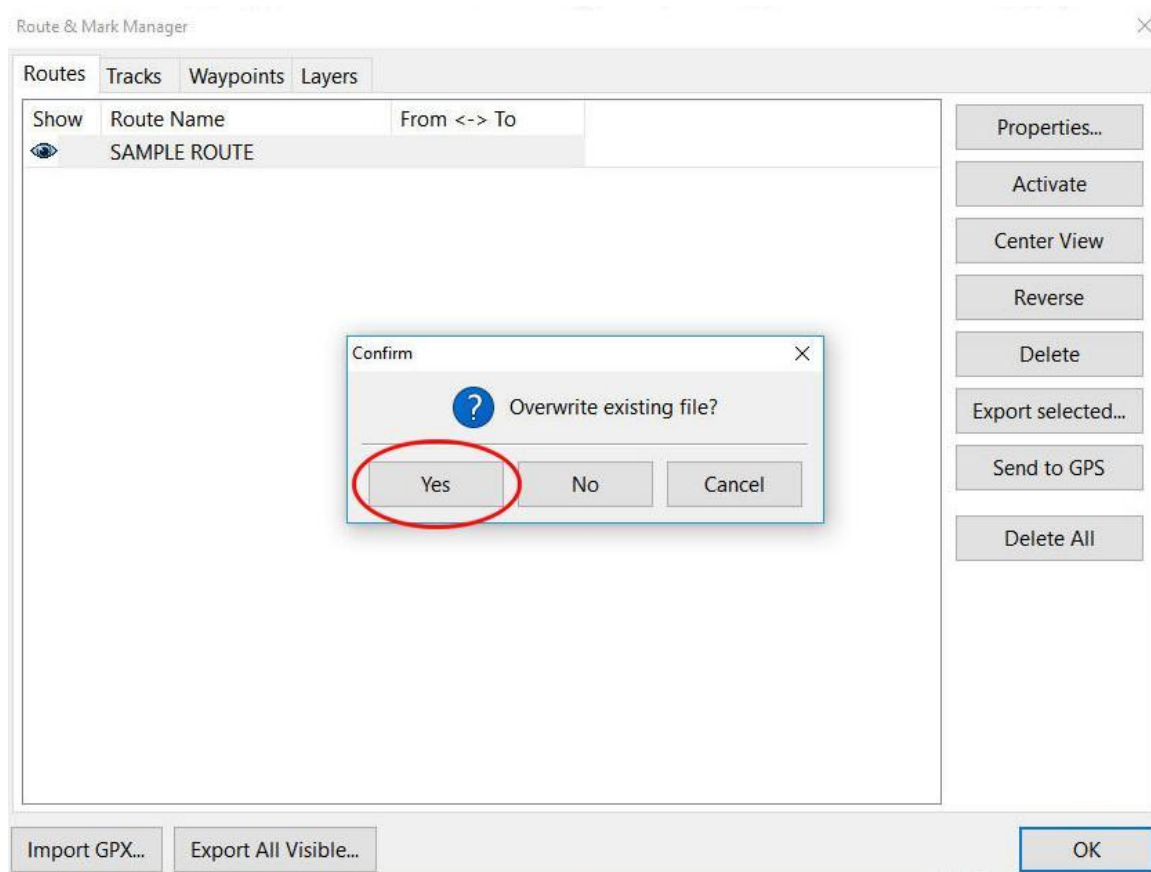
Print Route Extend Route Split Route Cancel OK



# ROUTES

## Change a Route

The route was saved previously and does not contain the newly created information. From the 'Route & Mark Manager' export the route again letting it overwrite the old route.

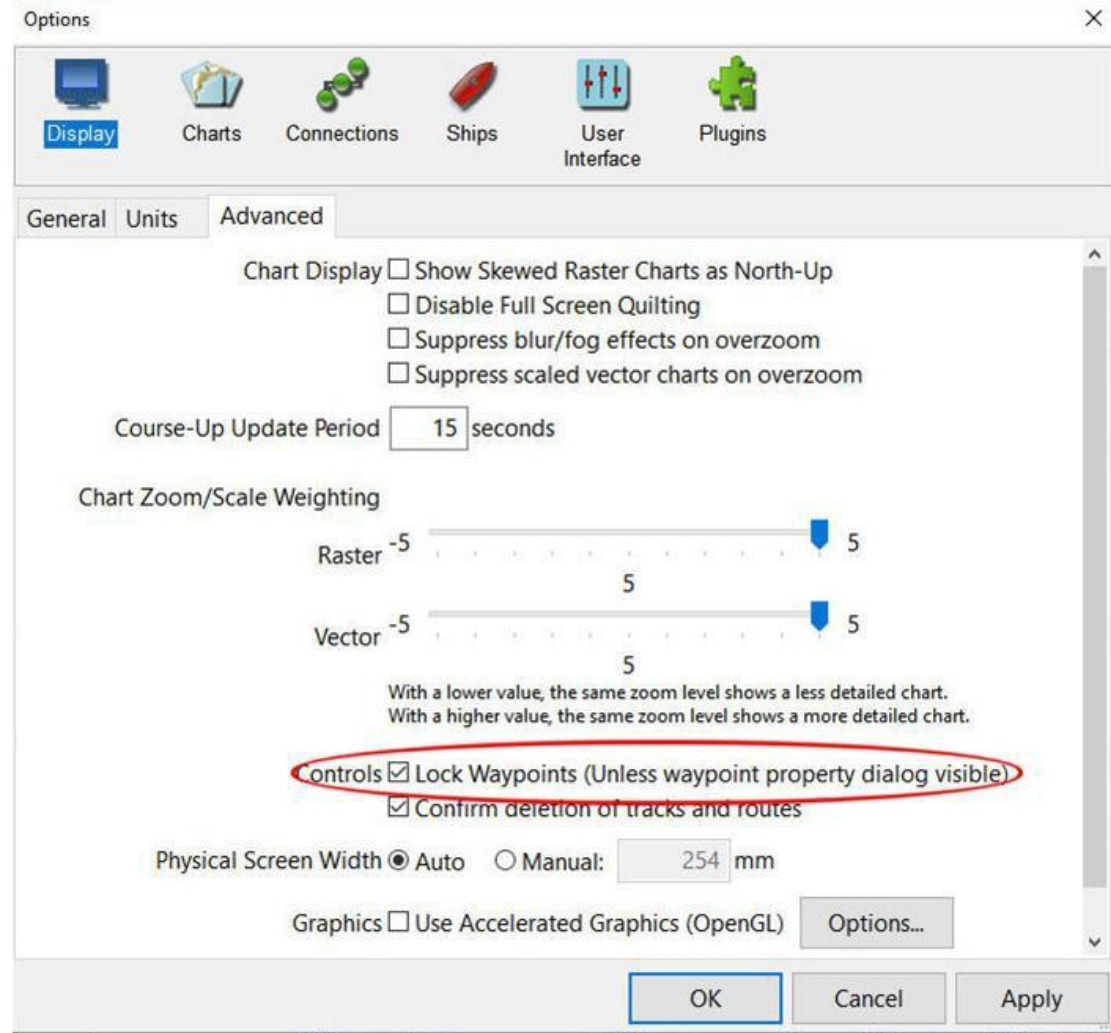


# LOCK WAYPOINTS

Earlier we saw how to lock or unlock waypoints using the 'Options/Advanced' page.

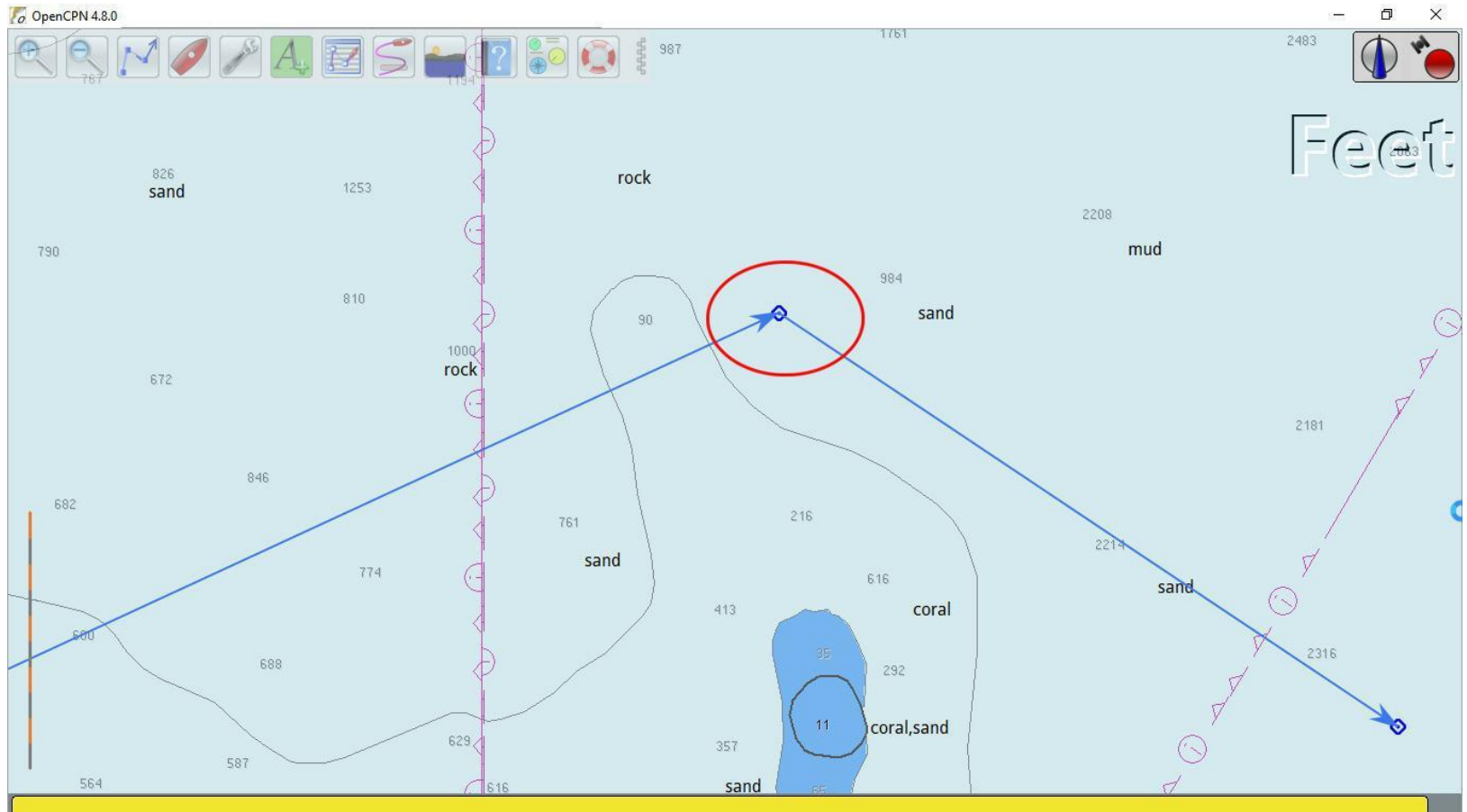
The rationale for keeping waypoints locked is to avoid the accidental change of a waypoint location while underway and following a route. (A 'finger fart')

And alternative exists to allow a waypoint to be temporarily unlocked and moved.



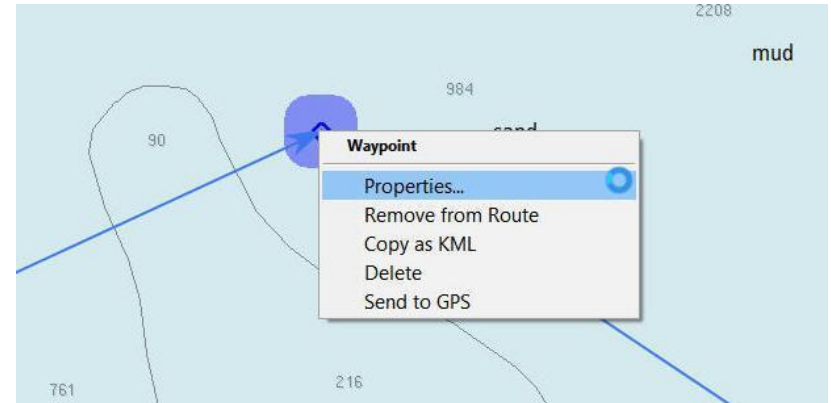
# LOCK WAYPOINTS

Here is a waypoint in a route I want to move. With the waypoints locked I cannot click and drag it.

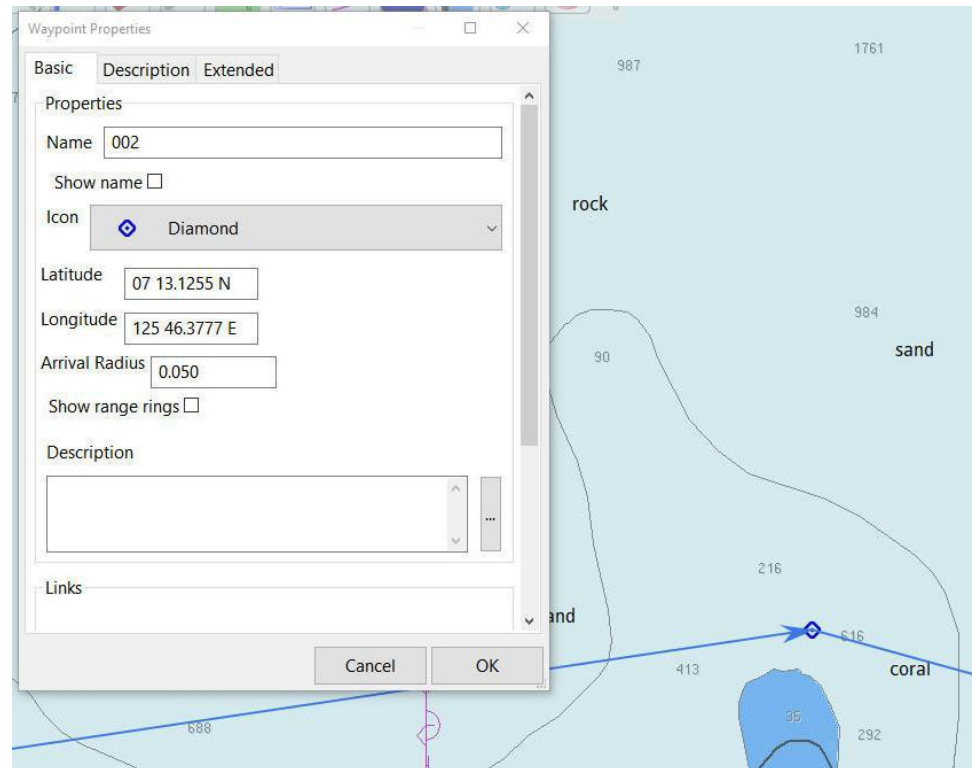


# LOCK WAYPOINTS

Right-click on the waypoint and select 'Properties'.



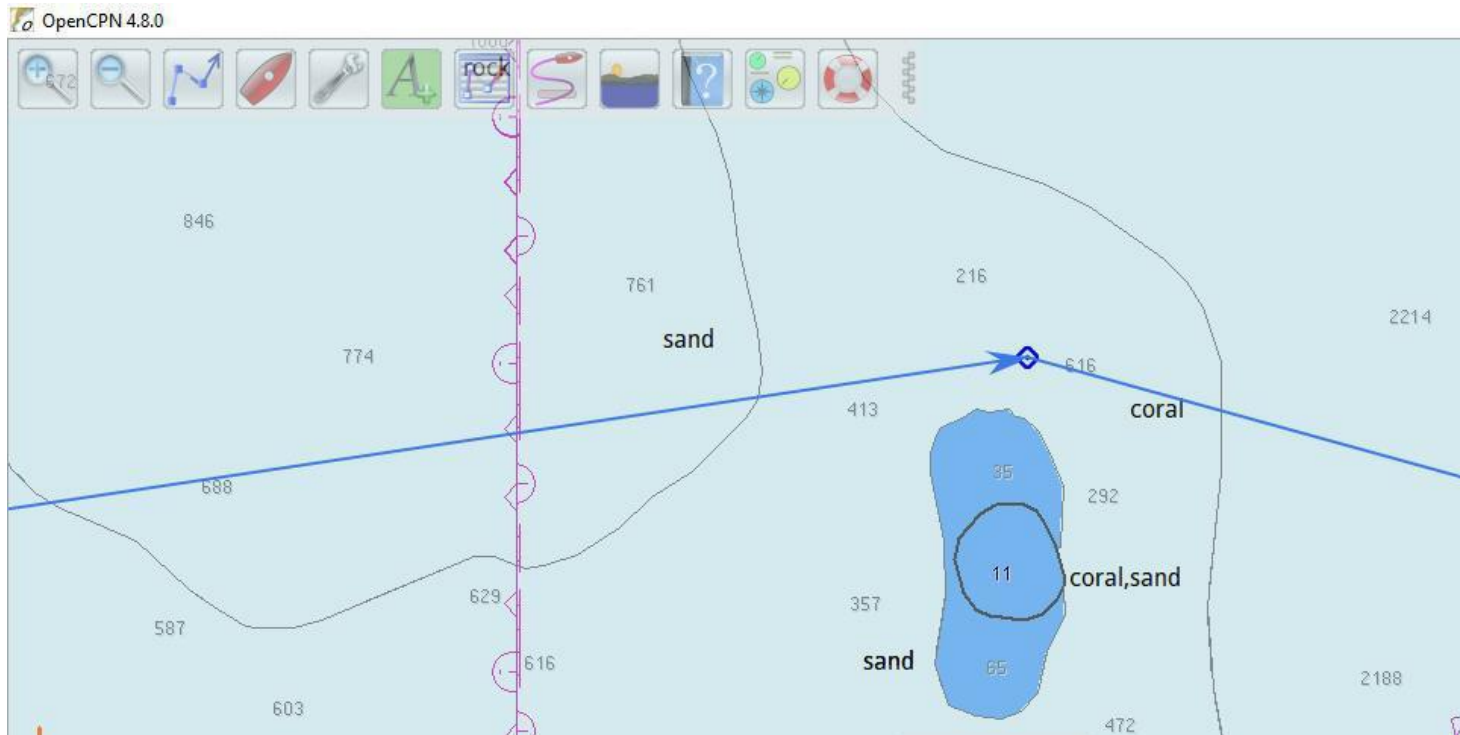
While the waypoint 'Properties' dialog screen is open the waypoint can now be moved.



# LOCK WAYPOINTS

Closing the 'Properties' dialog again locks the waypoint in the new position.

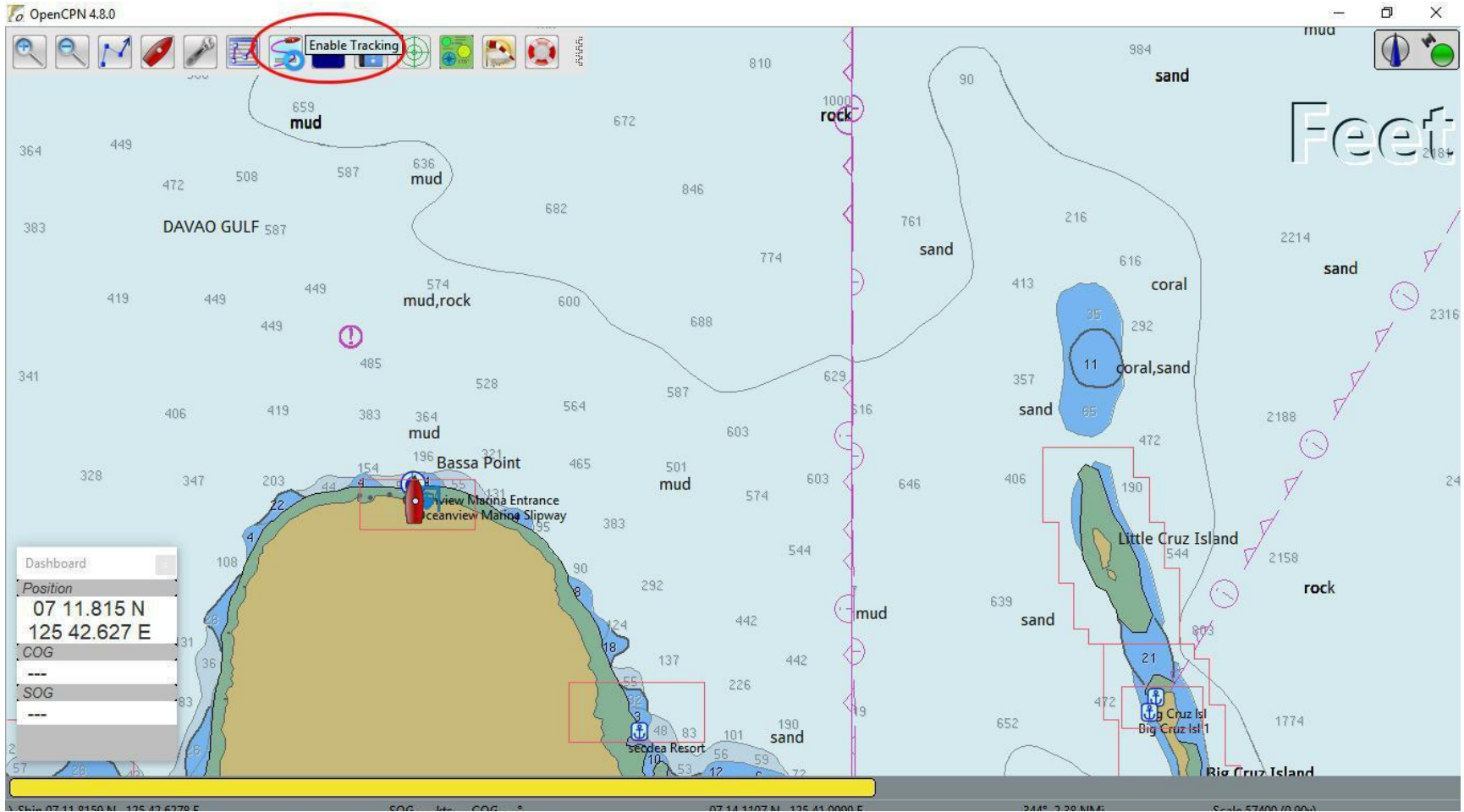
**REMEMBER TO 'Save' THIS CHANGED ROUTE!**



# TRACKS

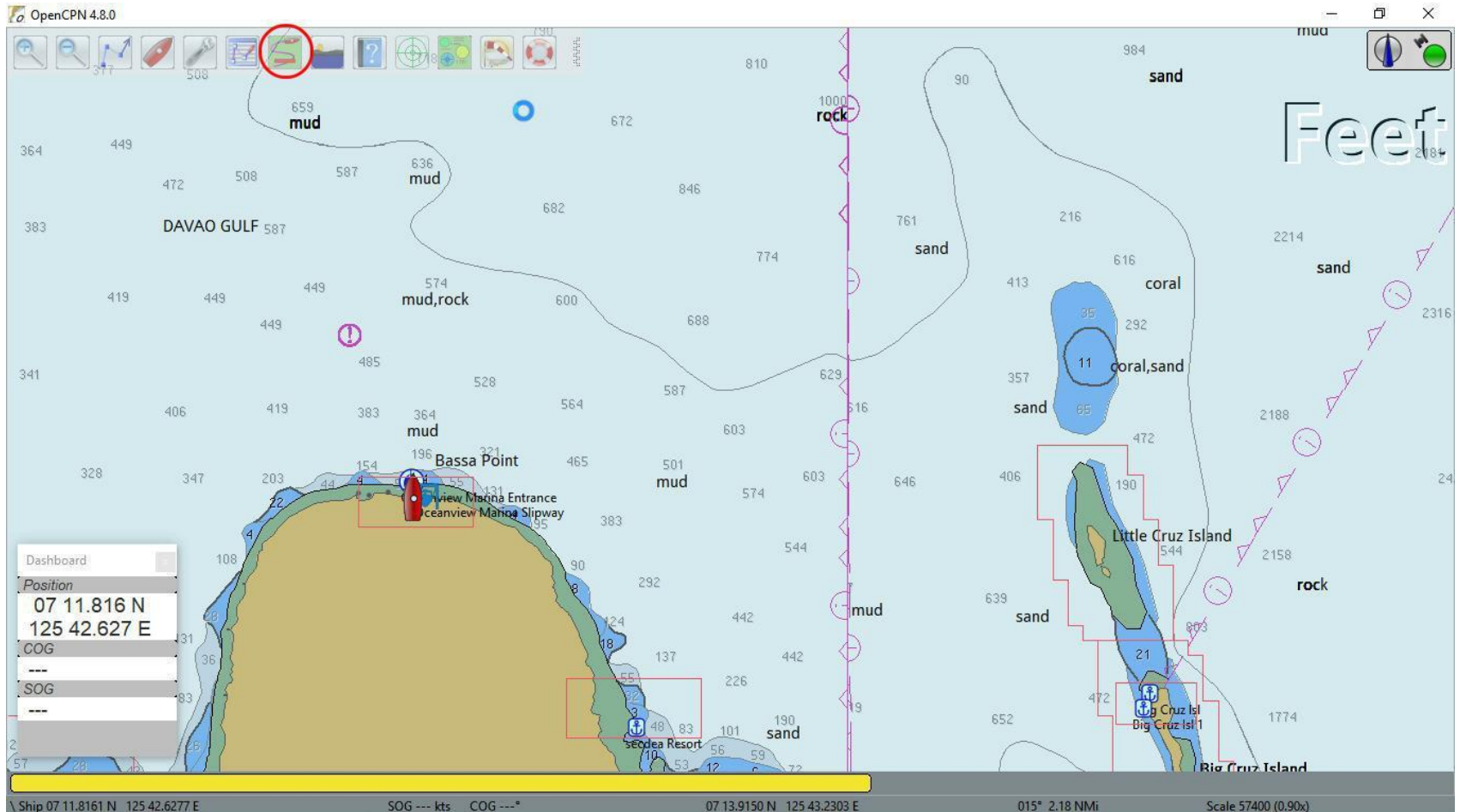
## Create a Track

Click on the 'Enable Tracking' icon to activate displaying your track. Note that here I have activated the 'Dashboard' plugin as well.





Tracking is confirmed by the icon becoming shaded.

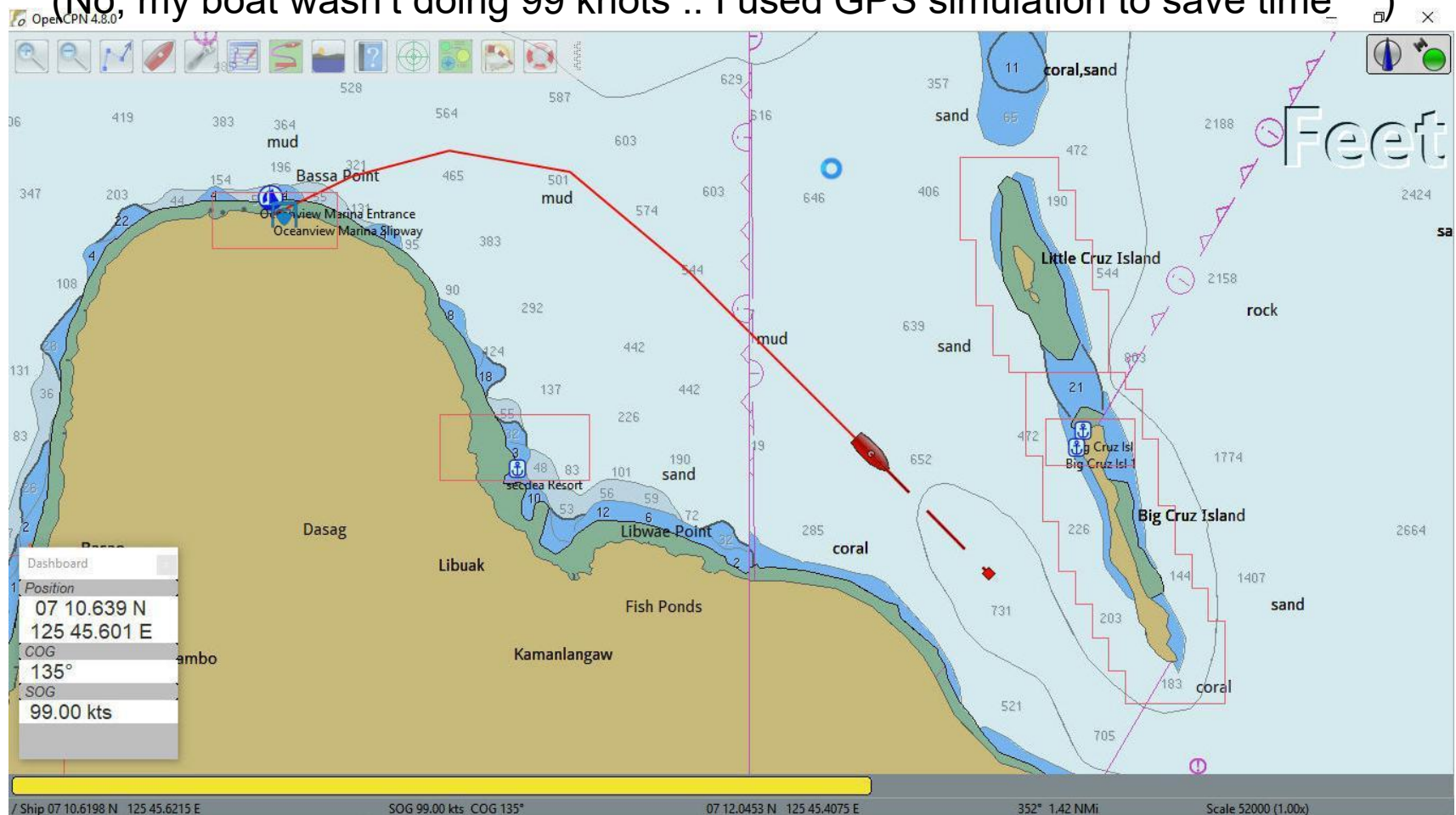


# TRACKS

## Create a Track

The vessel's track is displayed.

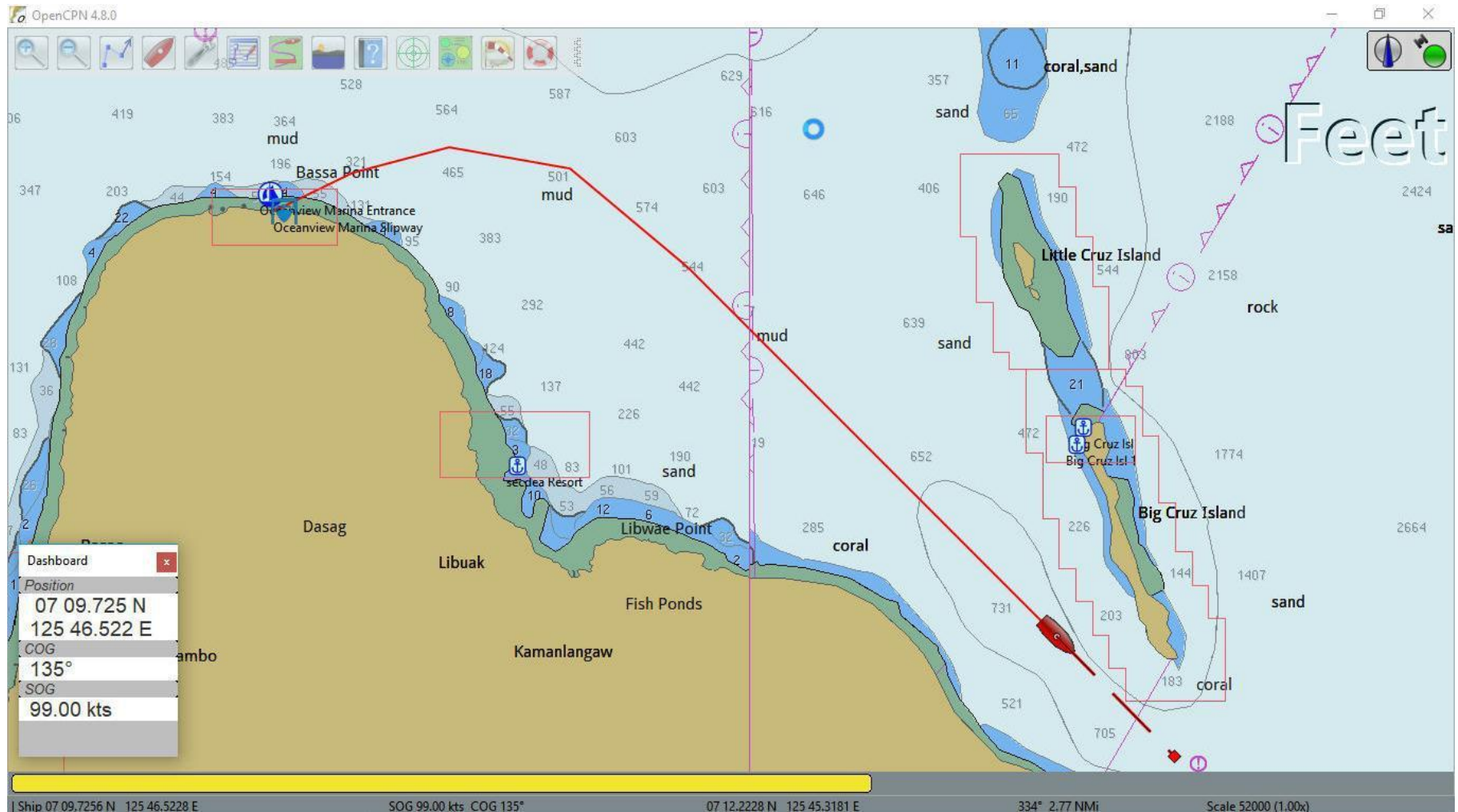
(No, my boat wasn't doing 99 knots .. I used GPS simulation to save time 😊)



# TRACKS

## Create a Track

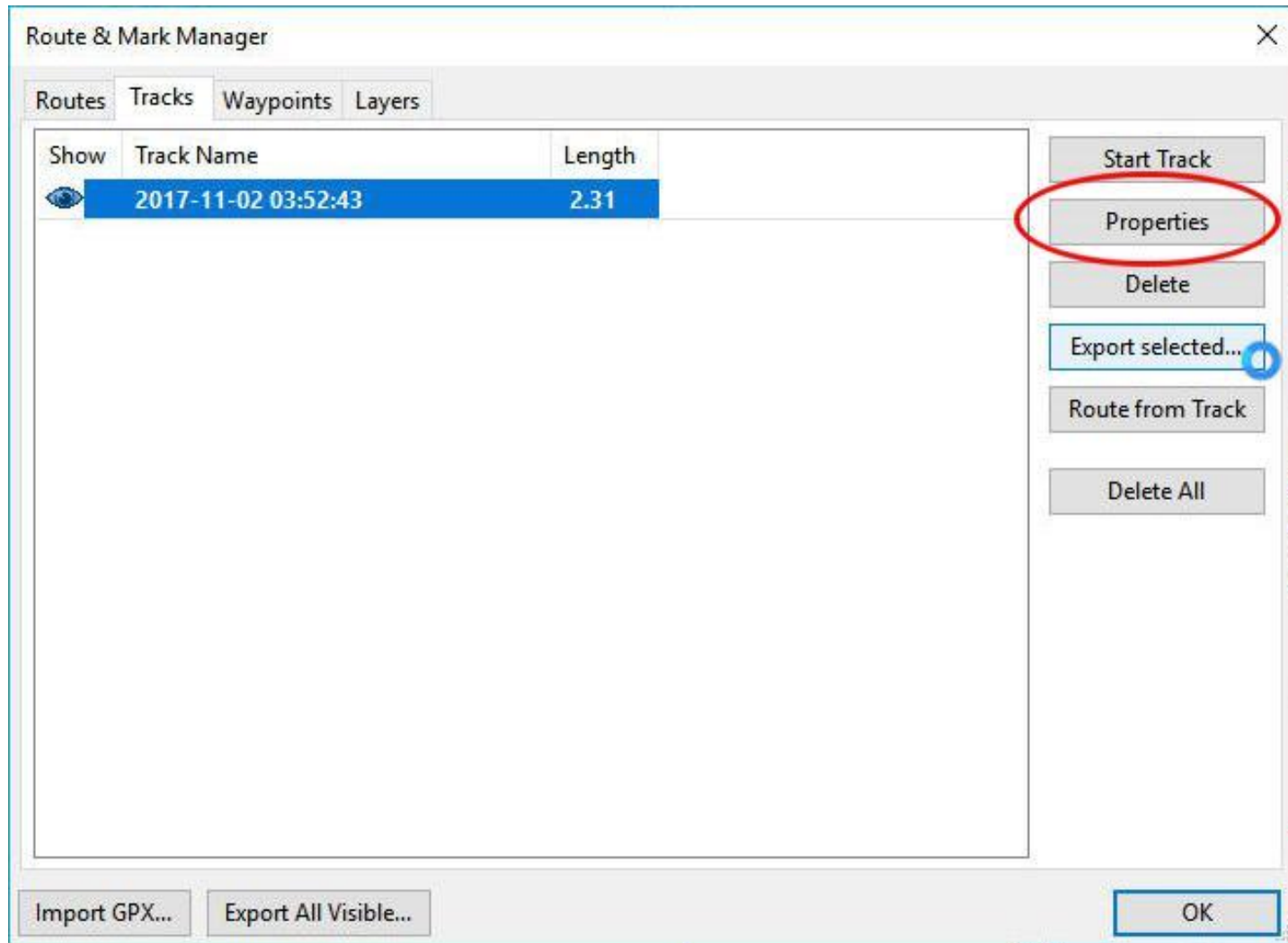
The simulation is stopped here to describe saving the track.



# TRACKS

## Save a Track

In the 'Route & Mark Manager' highlight the track and click on 'Properties'



# TRACKS

## Save a Track

Give the track a name (in this case 'SAMPLE TRACK') then click on 'OK'

Track properties

Basic Advanced

Name **SAMPLE TRACK**

From To

Display parameters

☒ Show on chart Color Default color Style Default Width Default

Statistics

Total distance 4.86 NMi Avg. speed 11.89 Time enroute 00:24

Recorded points

Leg	Distance	Bearing	Latitude	Longitude	Timestamp	Speed
---	0.00 NMi	174 °T	07 11.8138...	125 42.627...	11/02/2017 11:...	--
1	0.44 NMi	064 °T	07 12.0071...	125 43.026...	11/02/2017 11:...	199.38
2	0.50 NMi	075 °T	07 12.1351...	125 43.508...	11/02/2017 11:...	99.52
3	0.61 NMi	100 °T	07 12.0300...	125 44.108...	11/02/2017 11:...	99.58
4	0.72 NMi	130 °T	07 11.5706...	125 44.659...	11/02/2017 11:...	95.63
5	0.06 NMi	132 °T	07 11.5335...	125 44.700...	11/02/2017 11:...	99.19
6	2.57 NMi	135 °T	07 09.7256...	125 46.522...	11/02/2017 12:...	6.62

Print Split Extend Route To route Export

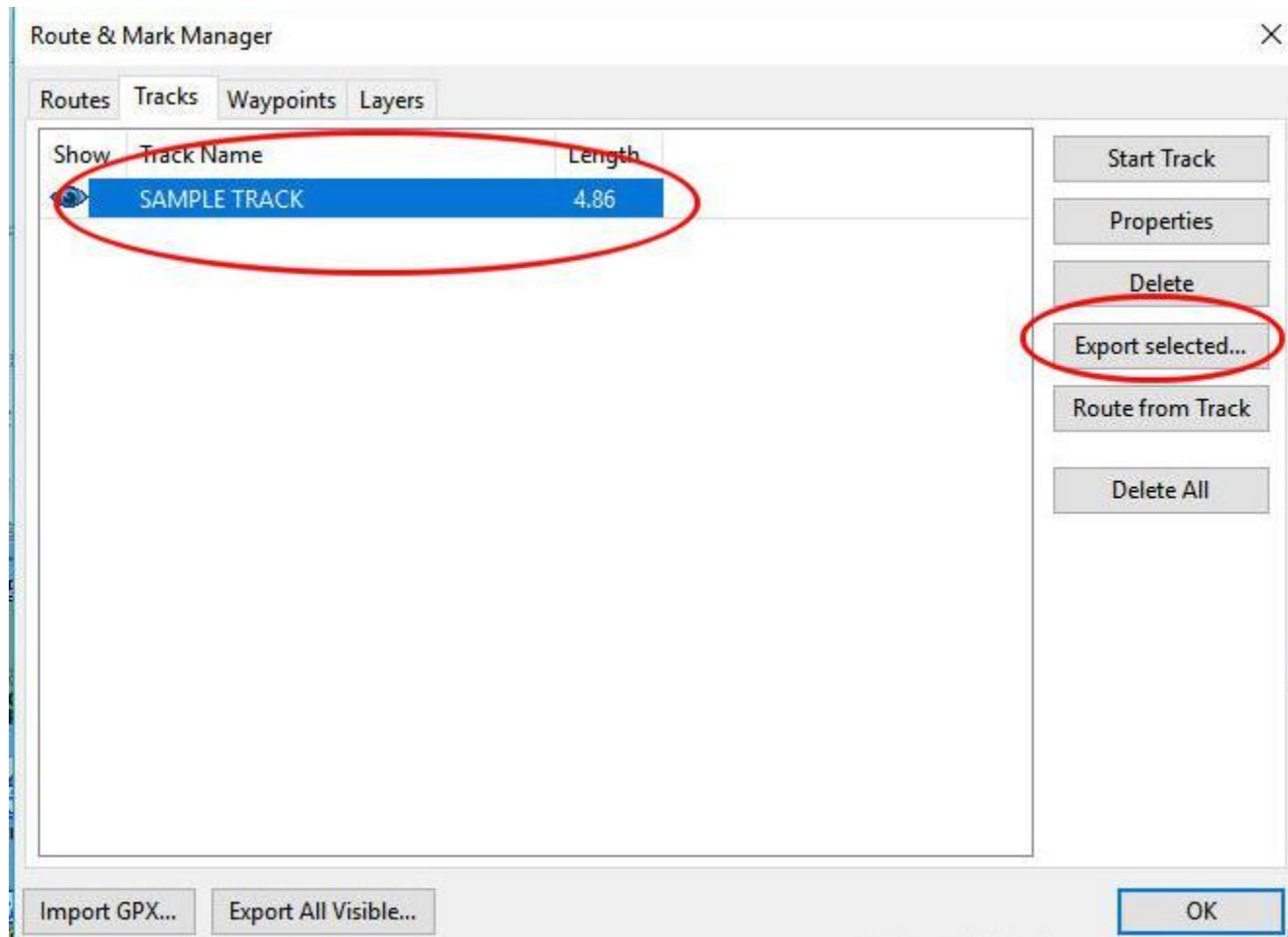
Cancel OK



# TRACKS

## Save a Track

Select the named track and click on 'Export selected ....':

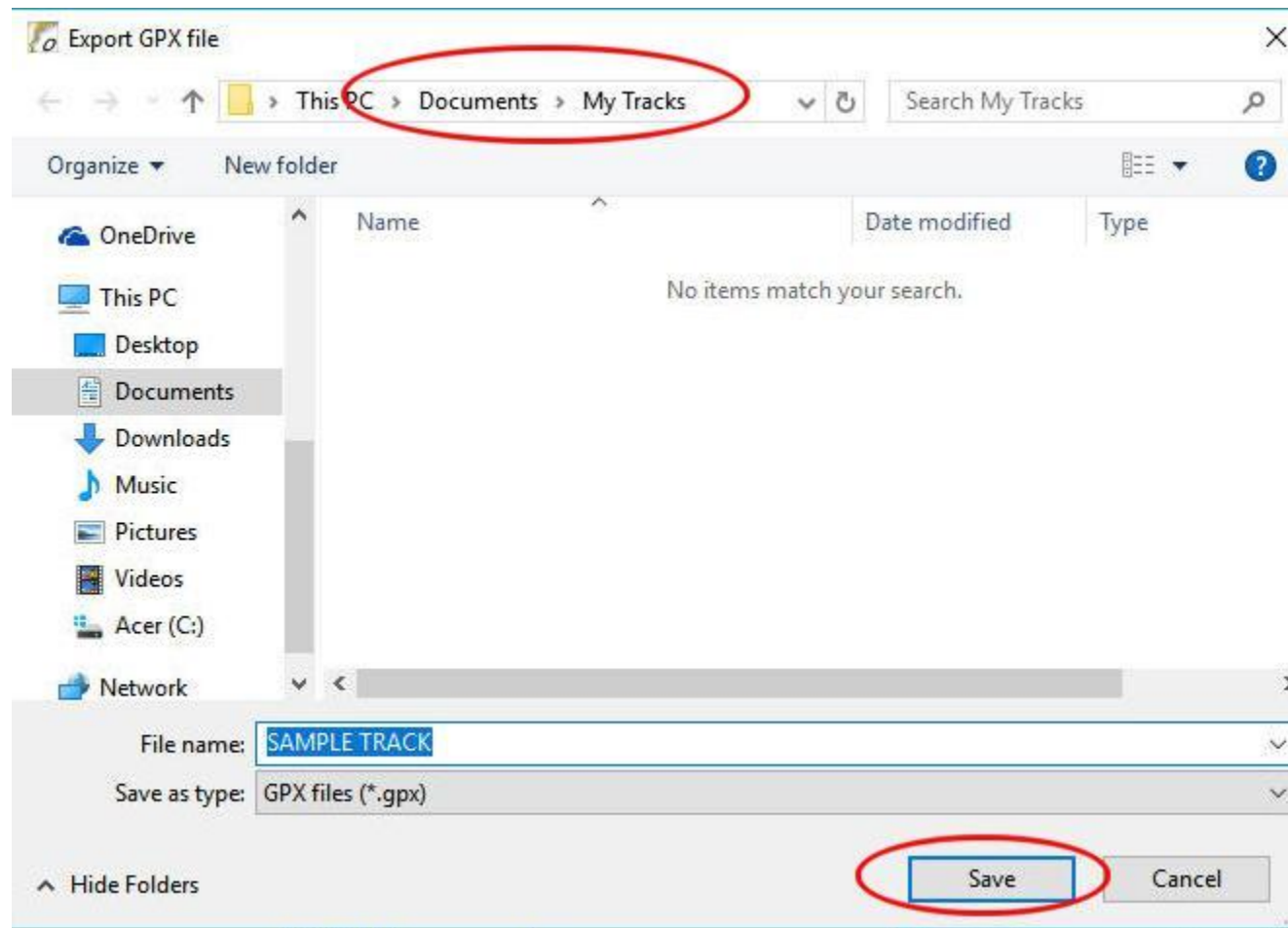




# TRACKS

## Save a Track

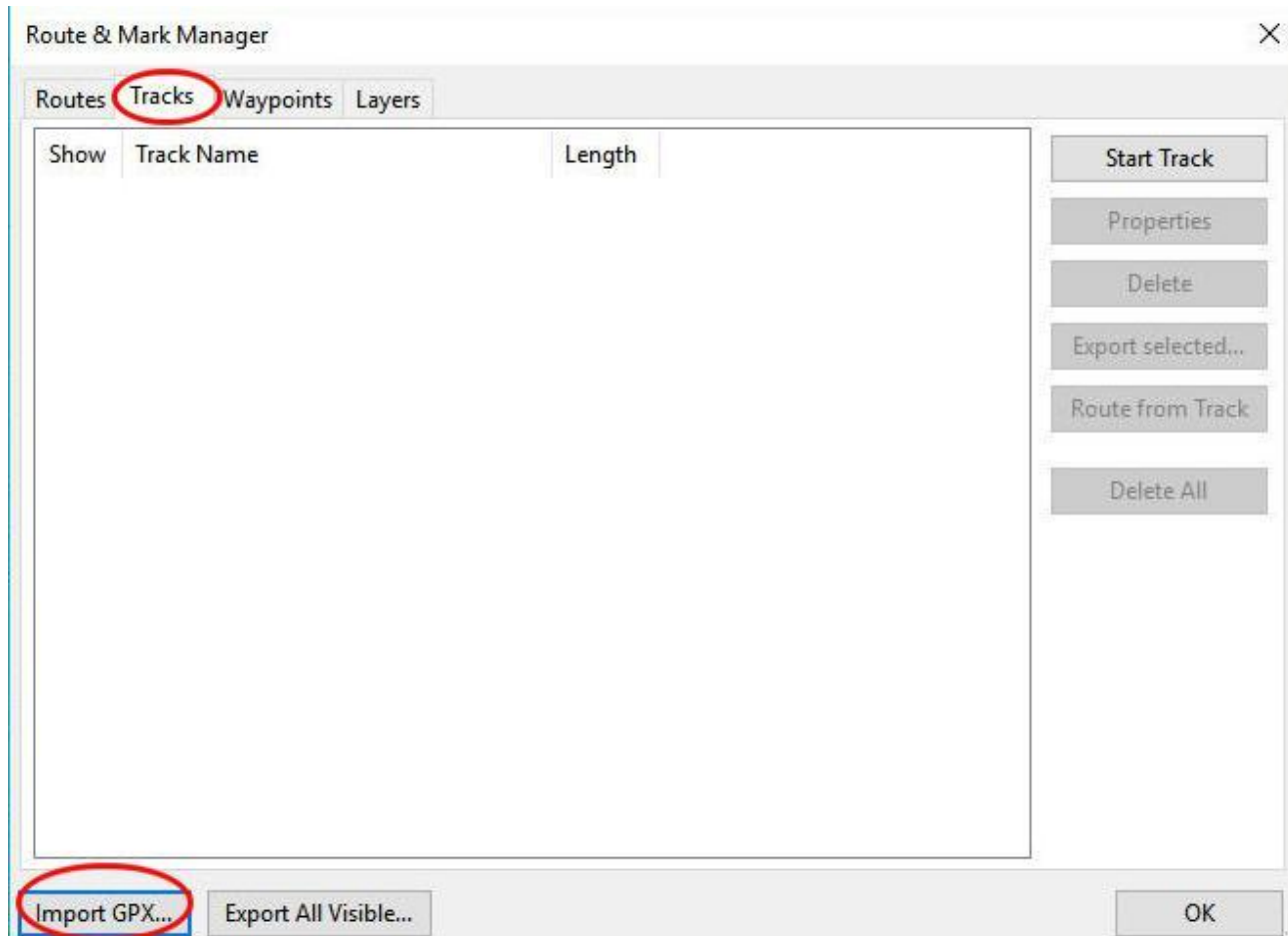
Navigate to where you save your tracks and click on 'Save'. The track is now saved on the hard drive for future reference.



# TRACKS

## Display a Saved Track

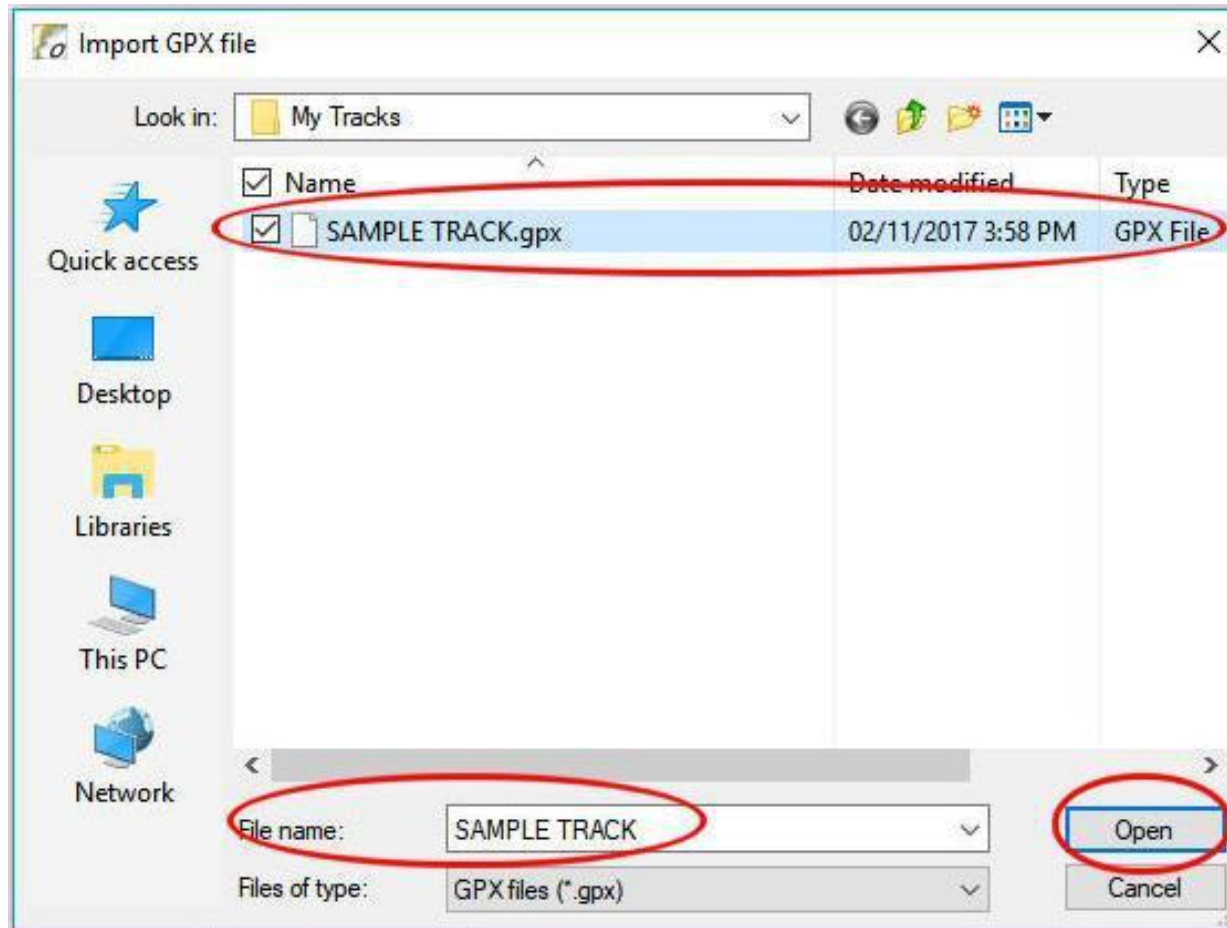
To display a saved track, in 'Route & Mark Manager' select the 'Tracks' tab and click on 'Import GPX ...'



# TRACKS

## Display a Saved Track

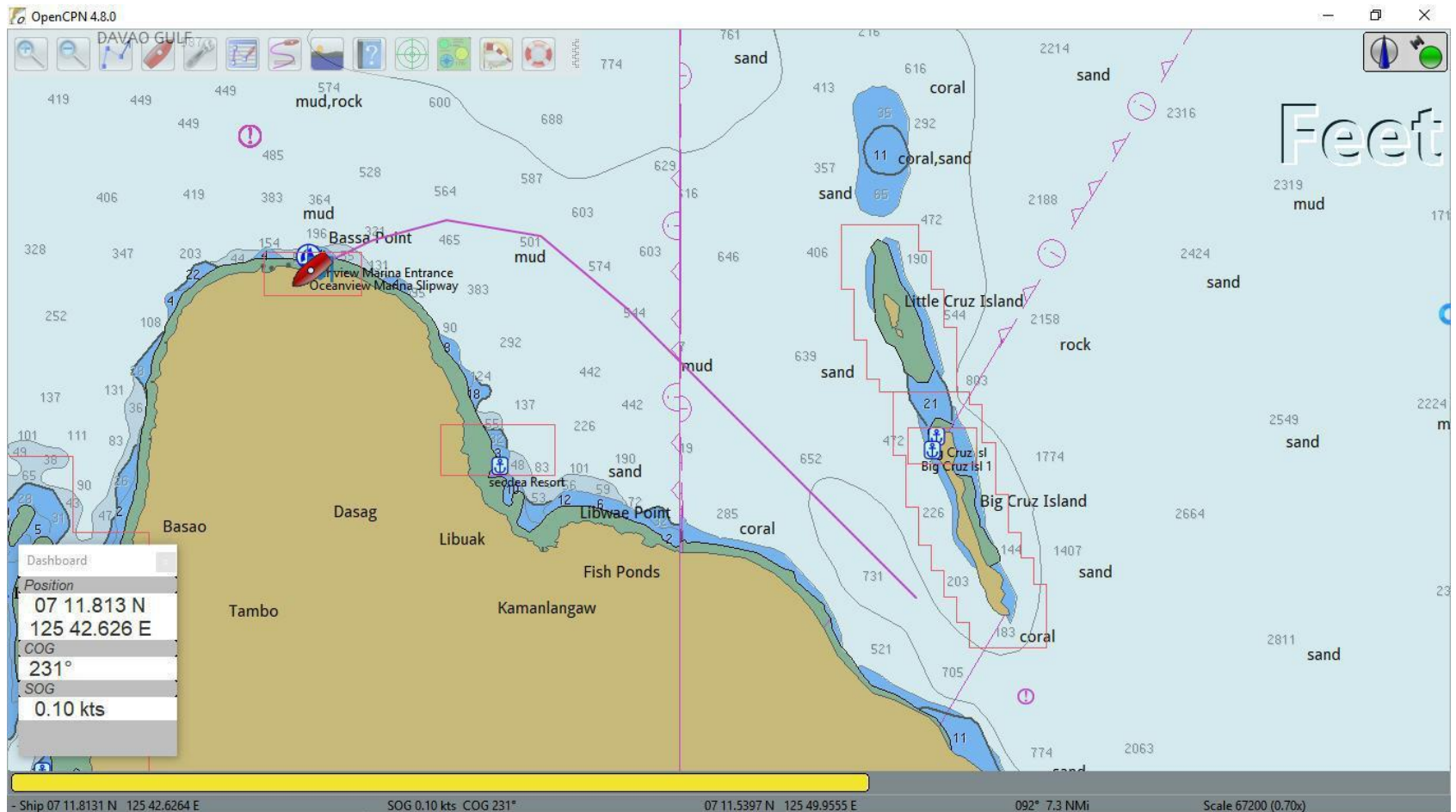
Navigate to your saved tracks, select the desired one (which fills in the 'File name box) and click on 'Open'.



# TRACKS

## Display a Saved Track

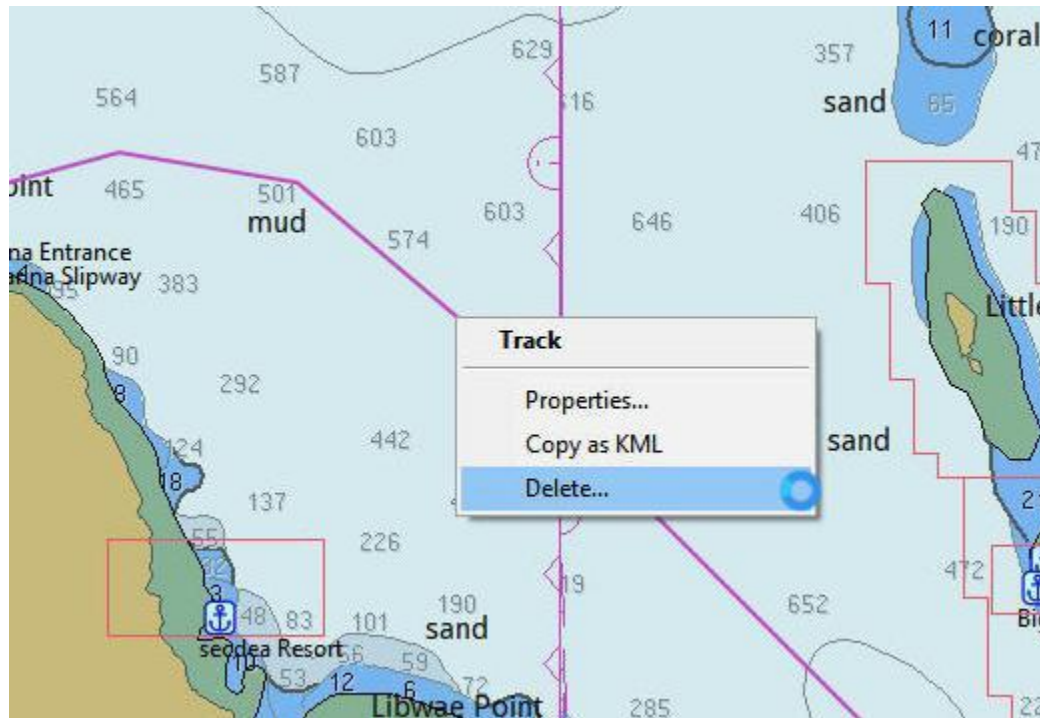
The track is displayed again on the chart.



# TRACKS

## Display a Saved Track

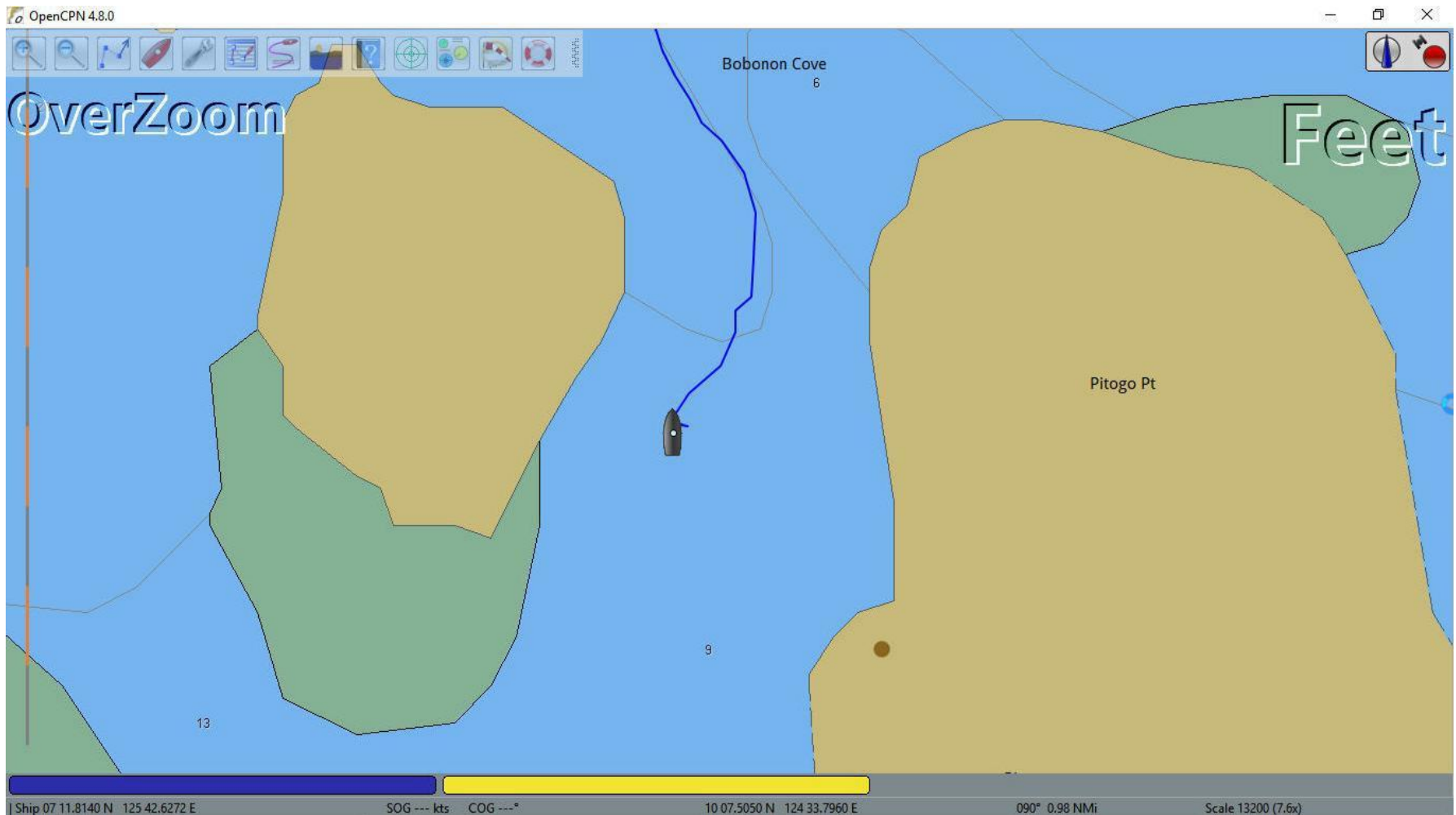
You can delete the track from the screen using the 'Route & Mark Manager' or by right-clicking on the track and selecting 'Delete'.



# ANCHORAGES

## Save an Anchorage Location

Shown below is the arrival at an anchorage. I want to save this location for future reference.

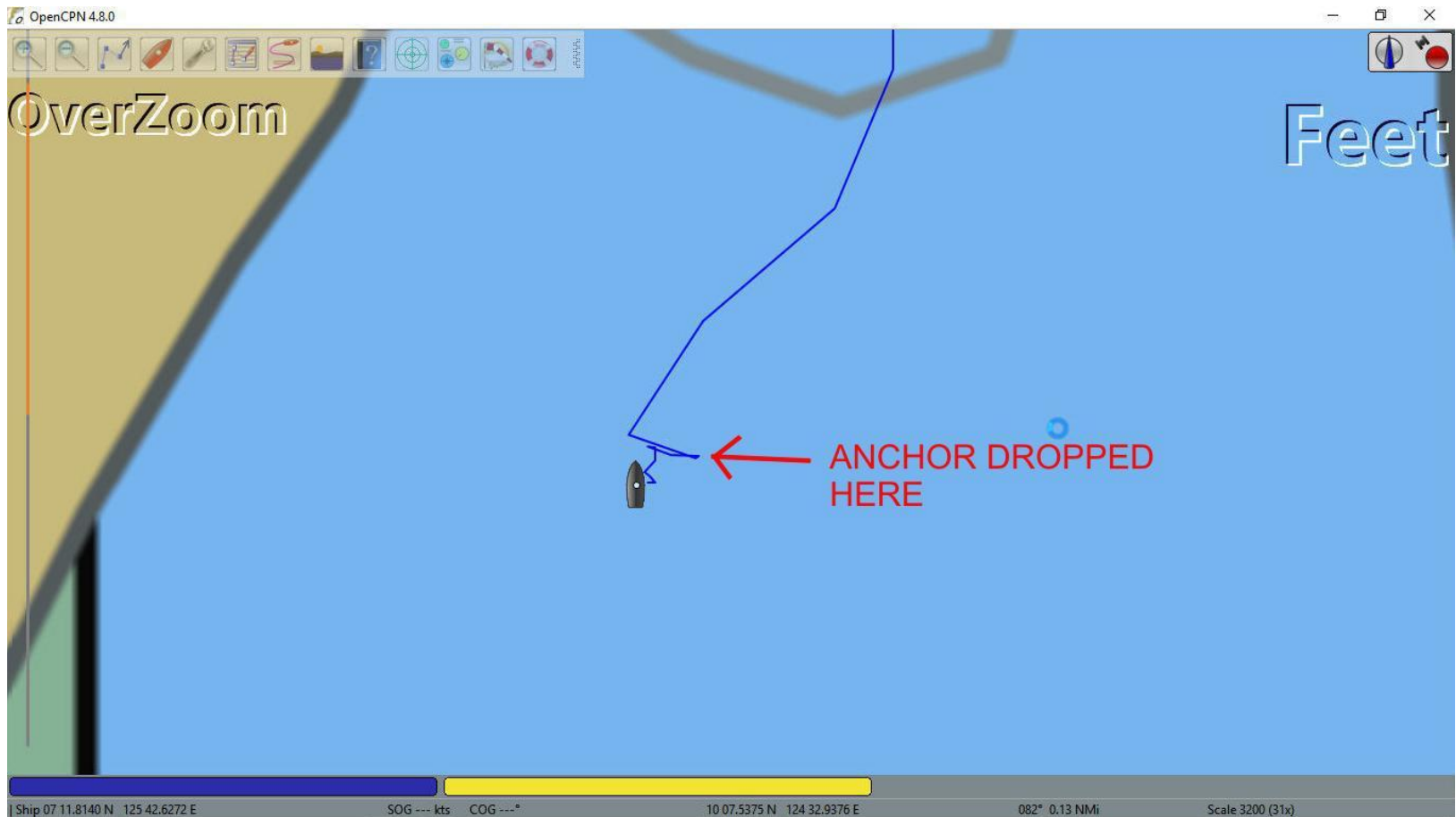




# ANCHORAGES

## Save an Anchorage Location

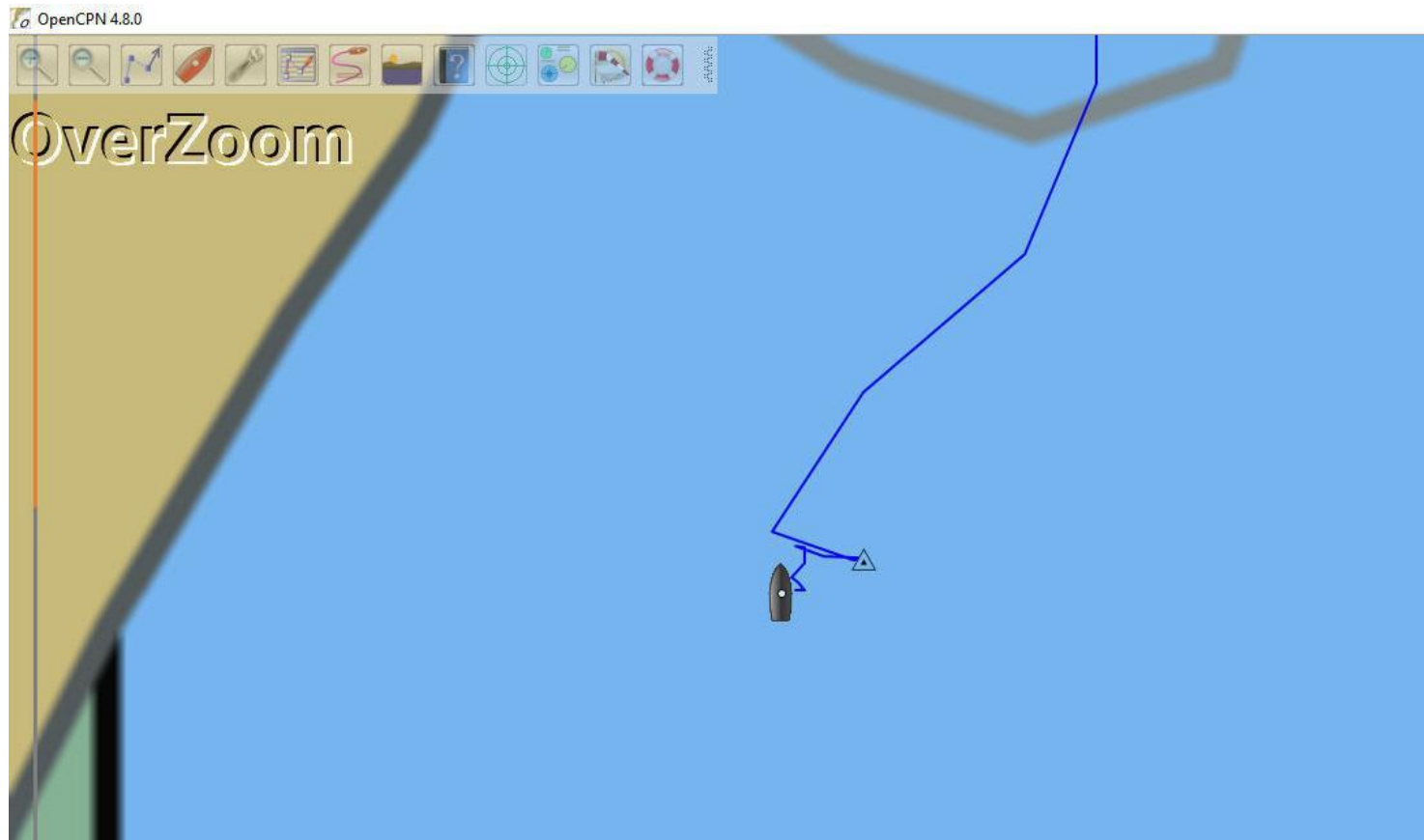
Zoom in to show where the anchor was dropped.



# ANCHORAGES

## Save an Anchorage Location

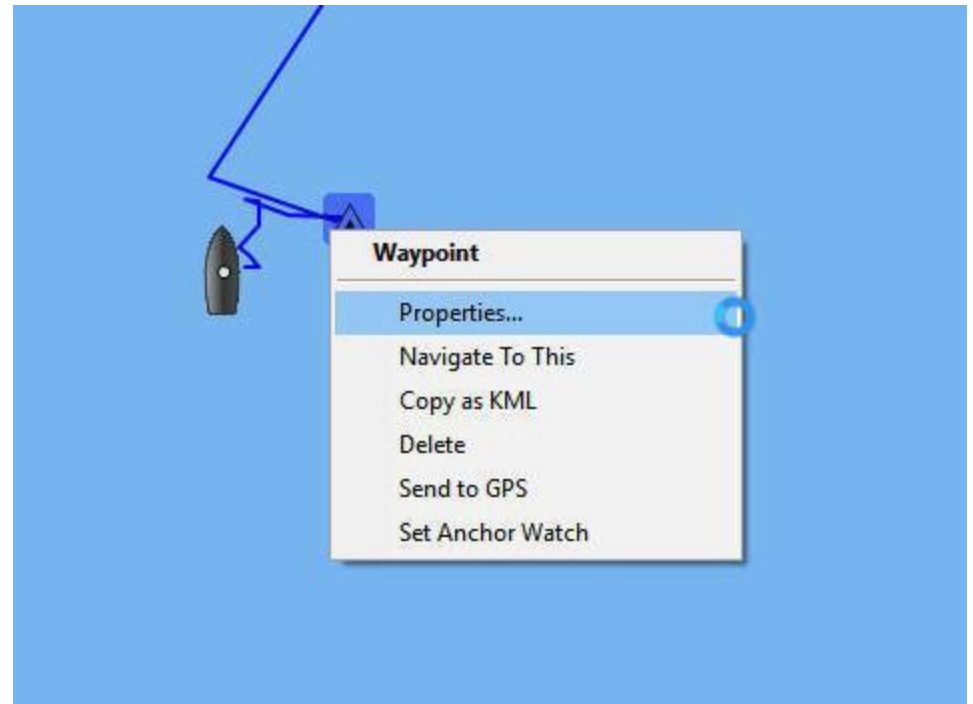
Right-click at the anchor location and click on 'Drop Mark' or use 'Ctl-M'.  
A small triangle appears at the selected point.



# ANCHORAGES

## Save an Anchorage Location

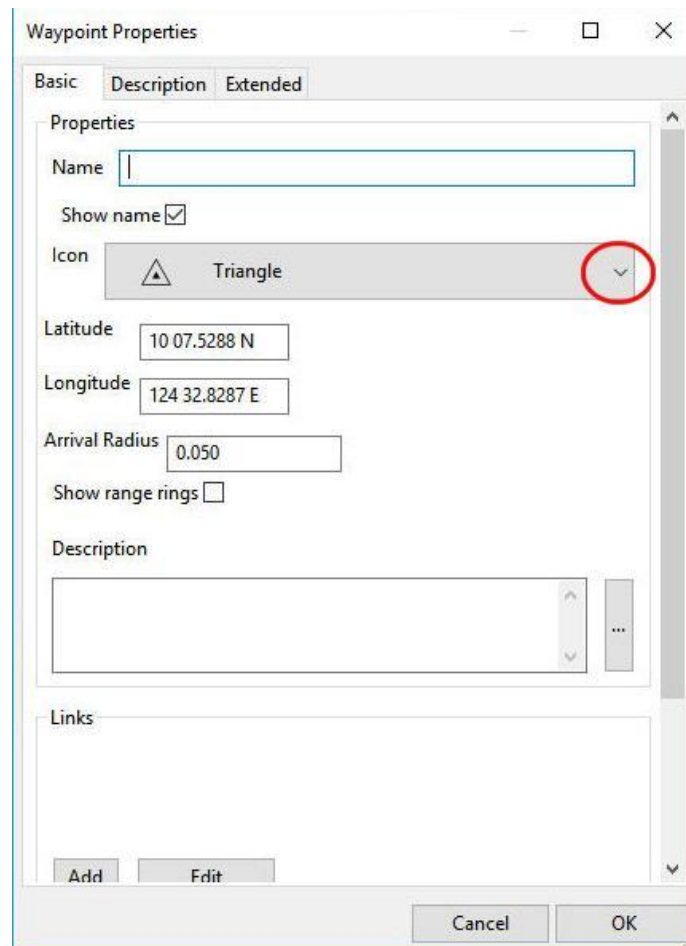
Right-click on the mark  
(triangle) and click on  
'Properties'



# ANCHORAGES

## Save an Anchorage Location

In addition to being hard to see the small triangle, a host of icons are available for marks that are easier to see and provide a better description. To view the available icons click on the elevator.



The image shows a 'Waypoint Properties' dialog box with three tabs: 'Basic', 'Description', and 'Extended'. The 'Basic' tab is selected. It contains the following fields and controls:

- Name:** A text input field.
- Show name:** A checked checkbox.
- Icon:** A dropdown menu showing a triangle icon and the text 'Triangle'. A red circle highlights the dropdown arrow on the right side of the icon field.
- Latitude:** A text input field containing '10 07.5288 N'.
- Longitude:** A text input field containing '124 32.8287 E'.
- Arrival Radius:** A text input field containing '0.050'.
- Show range rings:** An unchecked checkbox.
- Description:** A large text area with a vertical scrollbar and a small '...' button to its right.
- Links:** A large empty text area.

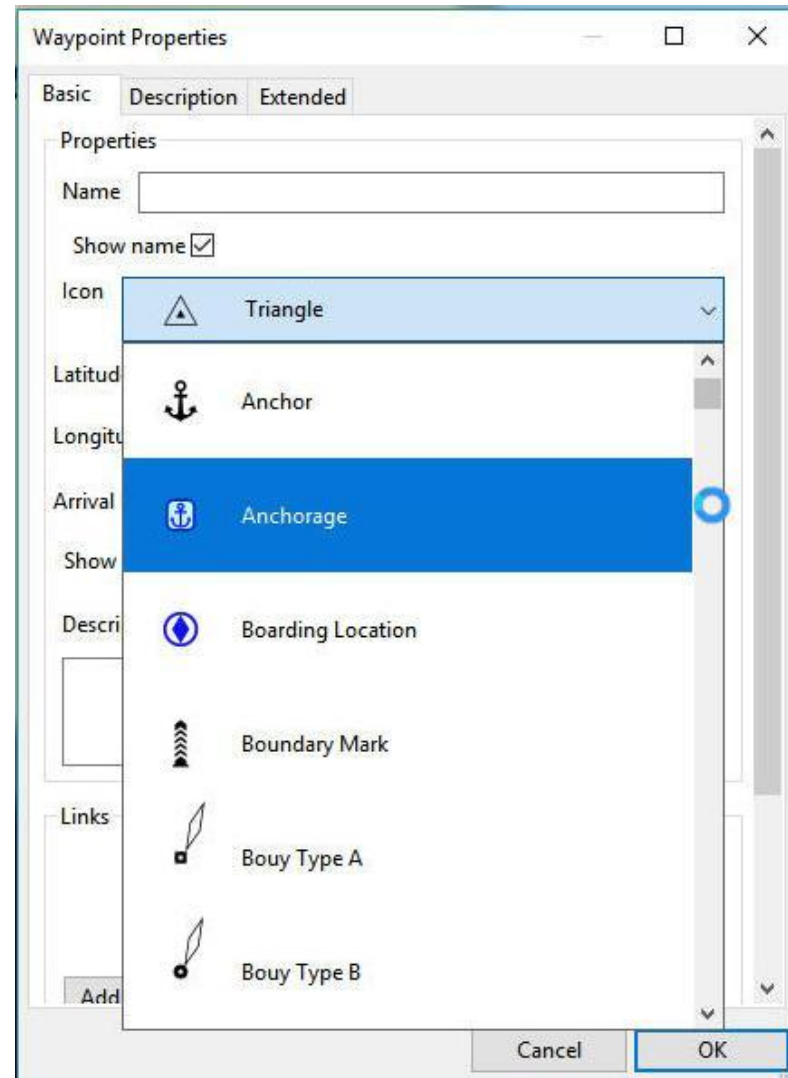
At the bottom of the dialog are three buttons: 'Add', 'Edit', and 'Cancel'. The 'OK' button is also present at the bottom right.

# ANCHORAGES

## Save an Anchorage Location

Since this is an anchorage select the 'Anchorage' icon.

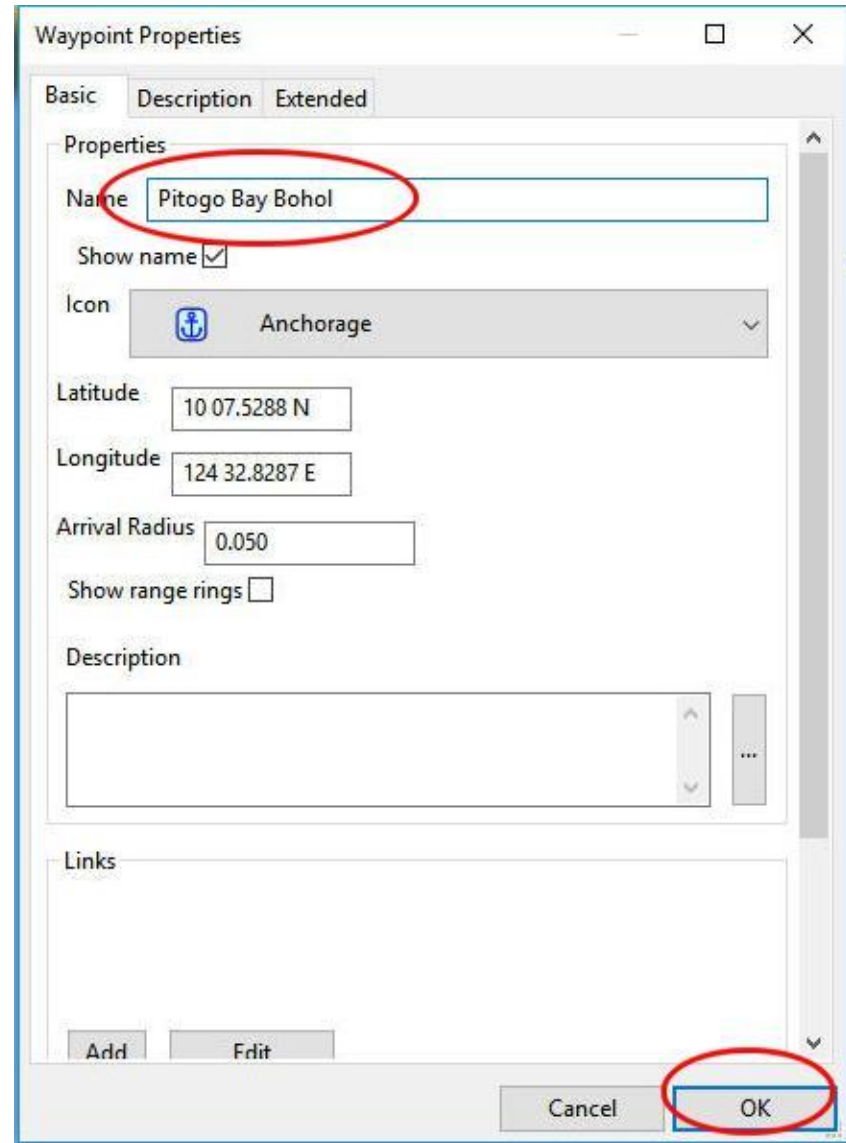
It's also a good idea to give the anchorage location a name.



# ANCHORAGES

## Save an Anchorage Location

Here I have entered a name to something easy to recognize in the future. When done click on 'OK'



The image shows a 'Waypoint Properties' dialog box with three tabs: 'Basic', 'Description', and 'Extended'. The 'Basic' tab is selected. In the 'Properties' section, the 'Name' field contains 'Pitogo Bay Bohol' and is circled in red. Below it, 'Show name' is checked. The 'Icon' dropdown shows an anchor icon and the text 'Anchorage'. The 'Latitude' field contains '10 07.5288 N' and the 'Longitude' field contains '124 32.8287 E'. The 'Arrival Radius' field contains '0.050' and 'Show range rings' is unchecked. The 'Description' section has a text area and a button with three dots. The 'Links' section has 'Add' and 'Edit' buttons. At the bottom right, the 'OK' button is circled in red, next to a 'Cancel' button.


Waypoint Properties

Basic Description Extended

Properties

Name Pitogo Bay Bohol

Show name ☒

Icon  Anchorage

Latitude 10 07.5288 N

Longitude 124 32.8287 E

Arrival Radius 0.050

Show range rings ☐

Description

Links

Add Edit

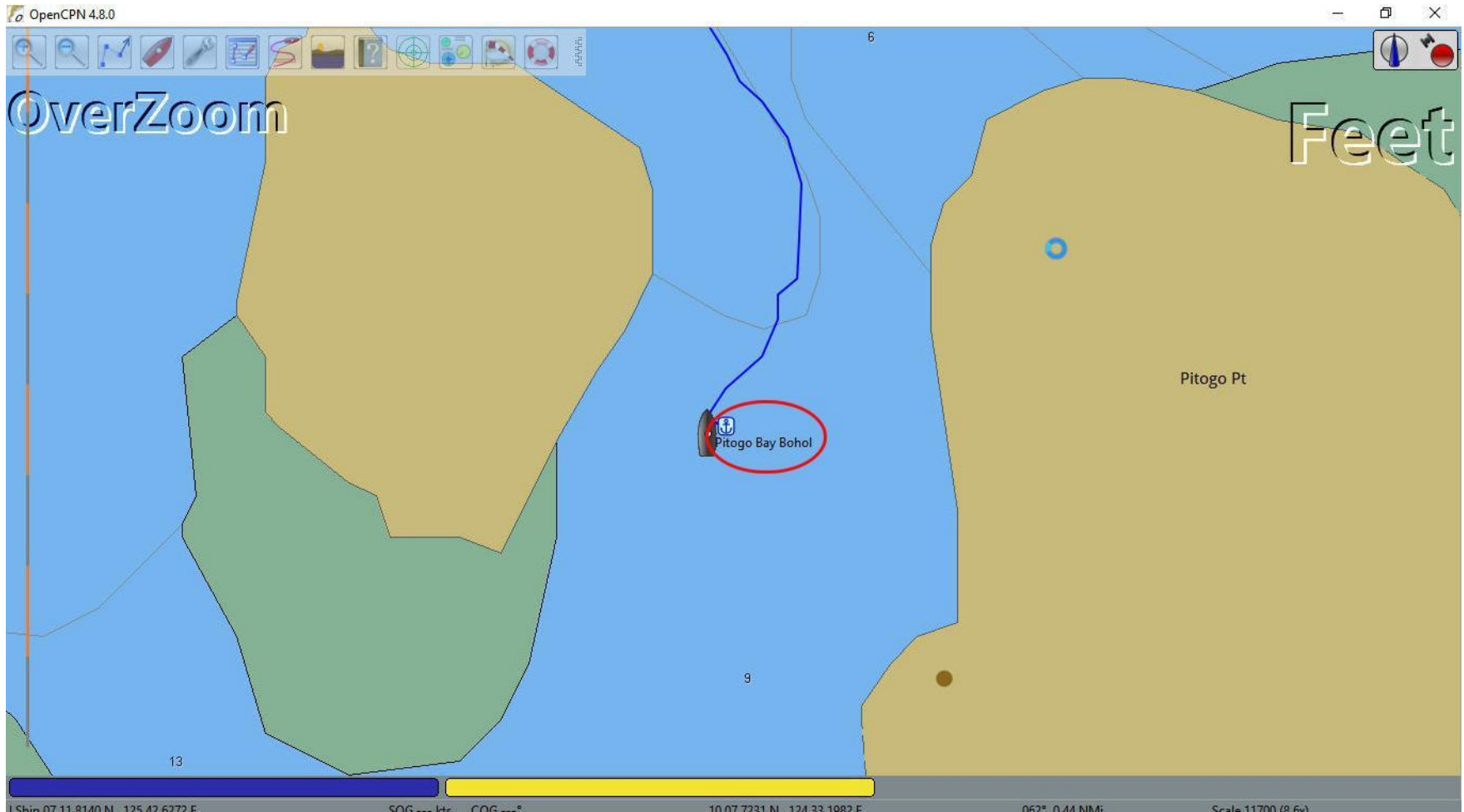
Cancel OK



# ANCHORAGES

## Save an Anchorage Location

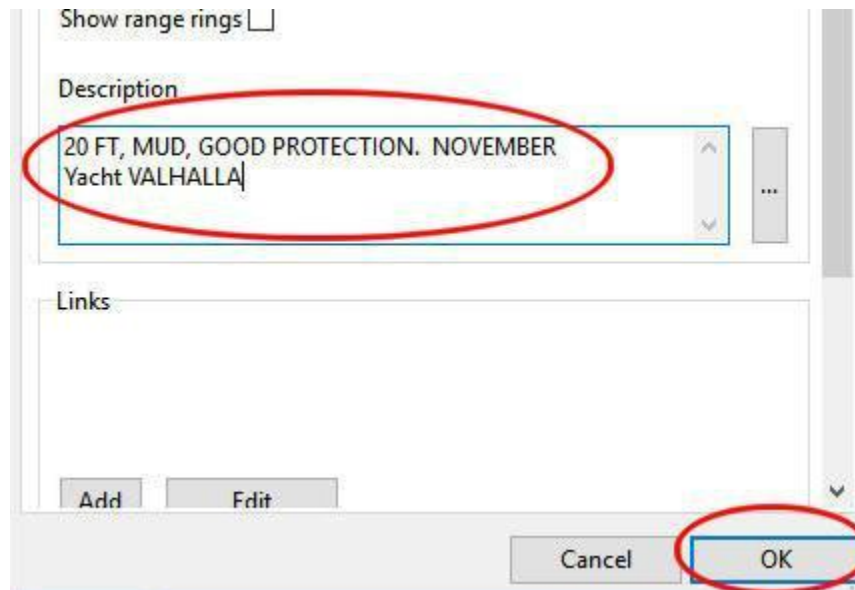
The anchorage is now created and displayed but **not saved!**



# ANCHORAGES

## Save an Anchorage Location

Prior to saving the anchorage location I suggest you add some information about it that can be useful to you in the future and also to any others you may share this information with. Go to the anchorage 'Properties' and enter the additional information in the 'Description' box.



The screenshot shows a dialog box titled 'ANCHORAGES' with the subtitle 'Save an Anchorage Location'. The dialog box has a 'Show range rings' checkbox at the top left. Below it is a 'Description' section with a text area containing the text '20 FT, MUD, GOOD PROTECTION. NOVEMBER Yacht VALHALLA'. The text area is highlighted with a red oval. Below the description is a 'Links' section with an empty text area. At the bottom of the dialog box are three buttons: 'Add', 'Edit', and 'OK'. The 'OK' button is highlighted with a red oval. The 'Cancel' button is also visible next to the 'OK' button.

# ANCHORAGES

## Save an Anchorage Location

As a minimum I suggest the depth, bottom composition and other useful information. The month of the year is helpful in monsoon locations. The name of the vessel maintains an audit trail.

Show range rings ☐

Description

20 FT, MUD, GOOD PROTECTION. NOVEMBER  
Yacht VALHALLA

Links

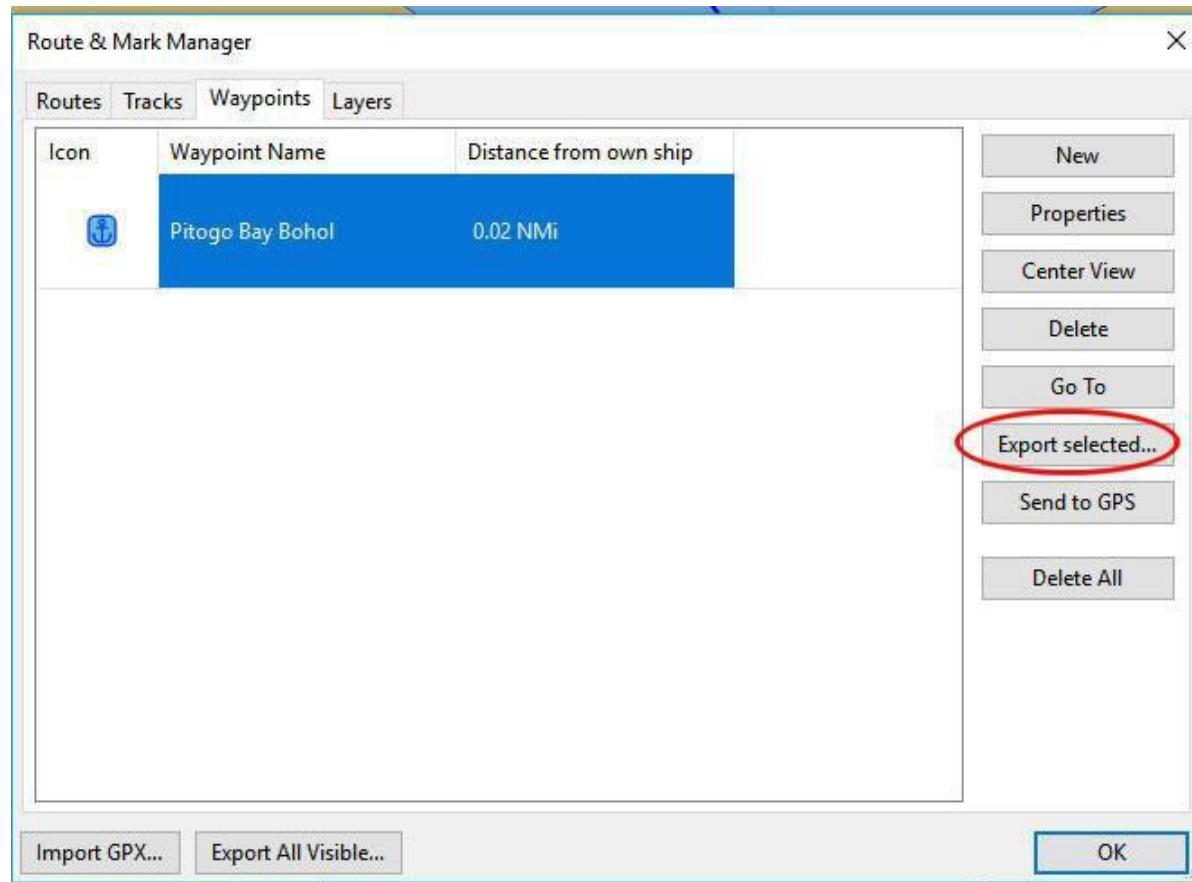
Add Edit

Cancel OK

# ANCHORAGES

## Save an Anchorage Location

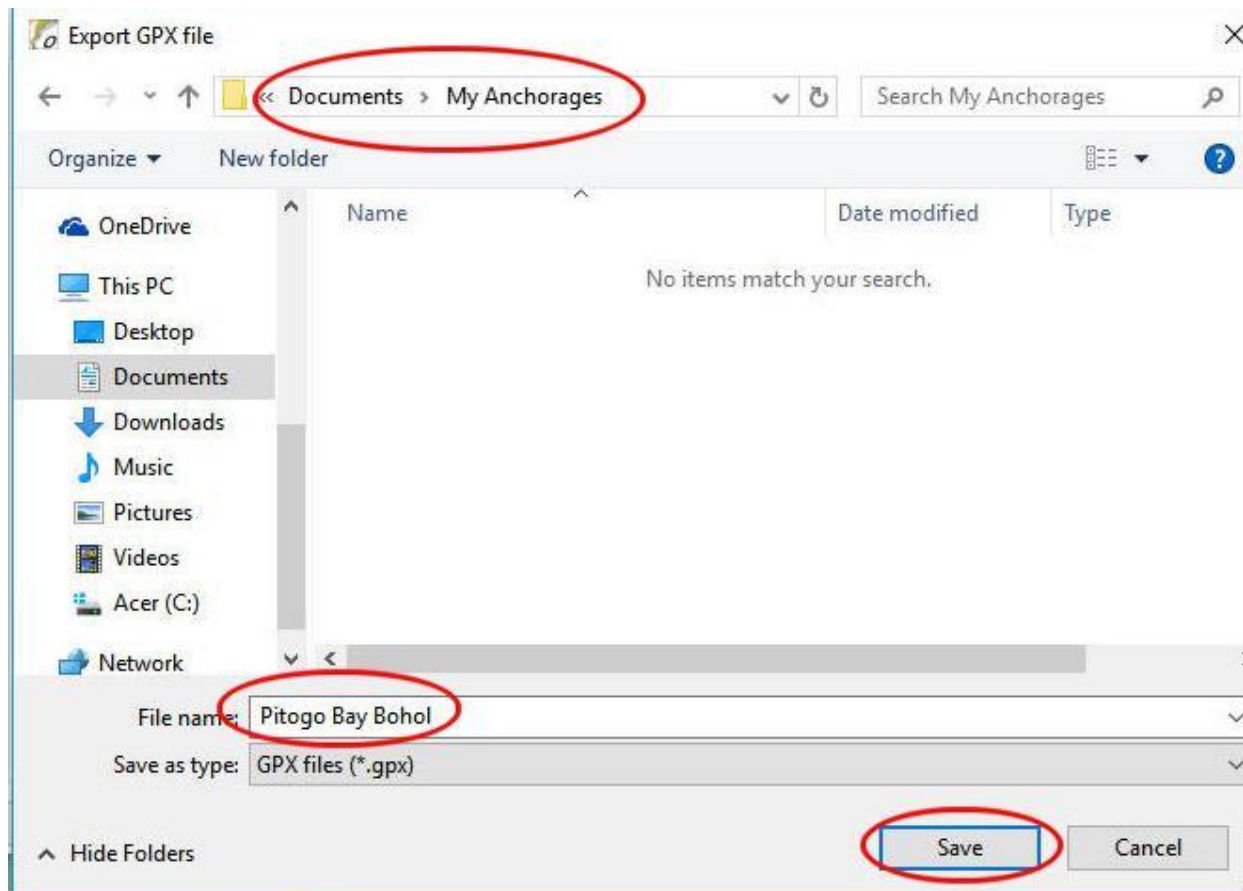
In 'Route & Mark Manager' highlight the anchorage and click on 'Export selected ...'



# ANCHORAGES

## Save an Anchorage Location

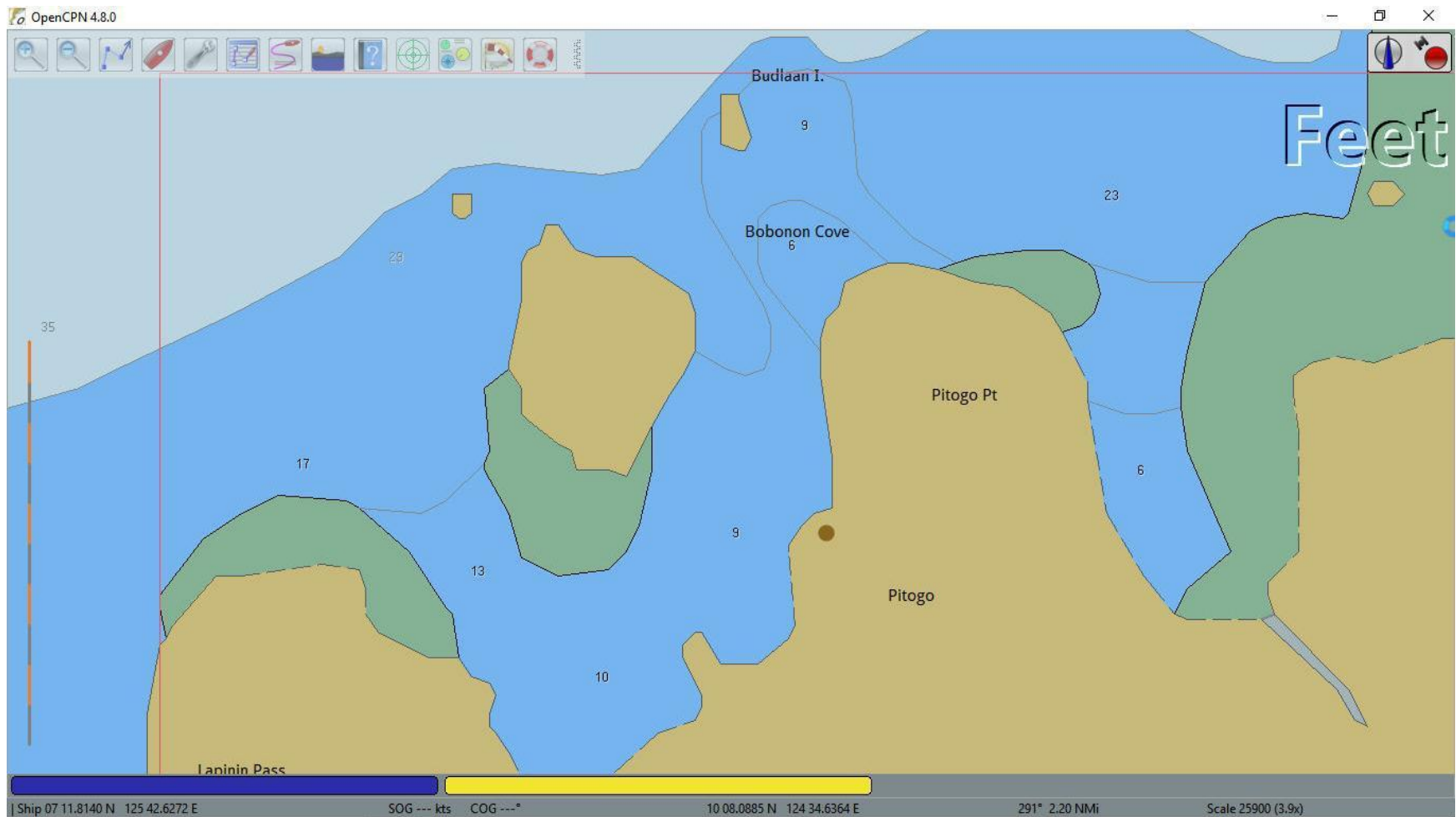
Navigate to where you save anchorages, check the file name for accuracy and click on 'Save'.



# ANCHORAGES

## Display a Saved Anchorage

Here I wish to recall the previously saved anchorage.

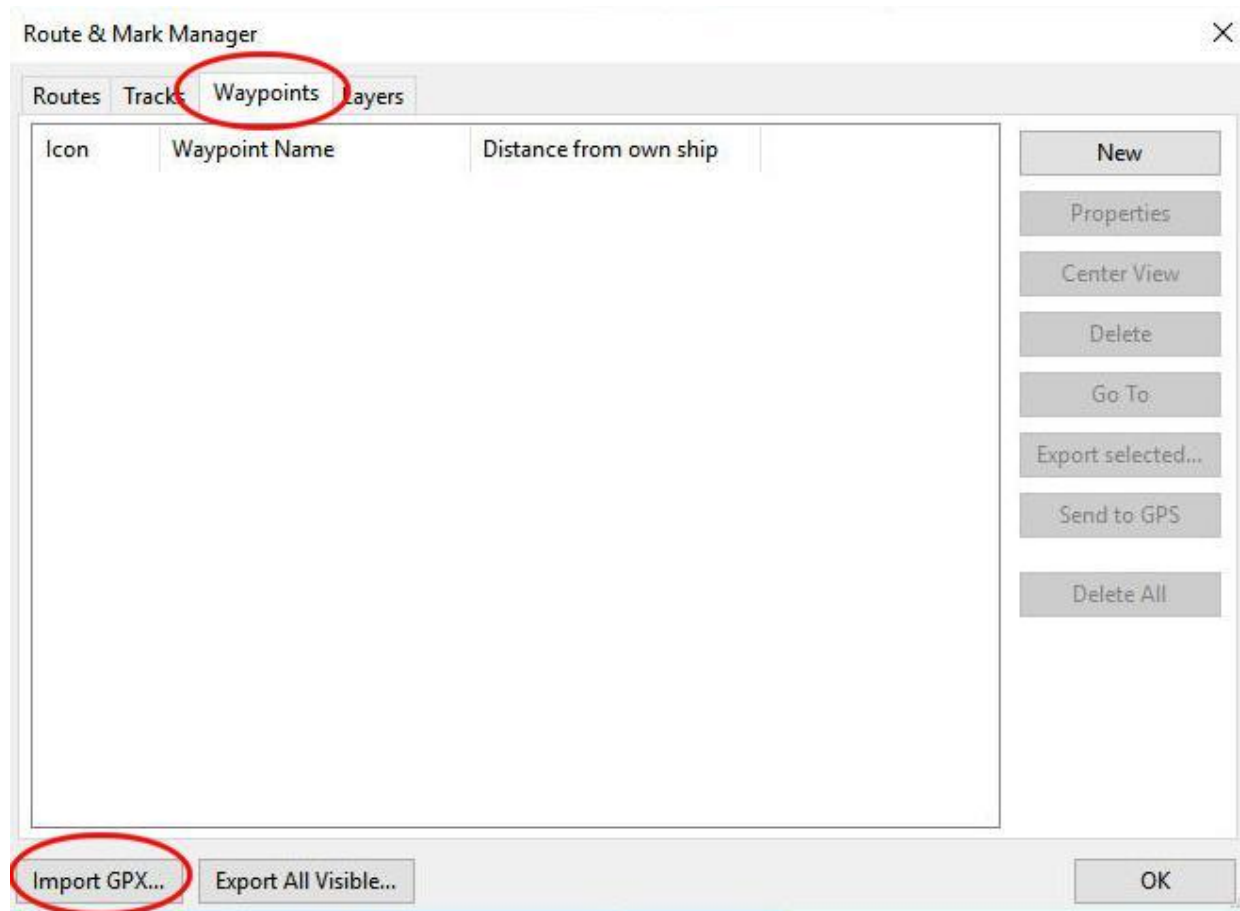




# ANCHORAGES

## Display a Saved Anchorage

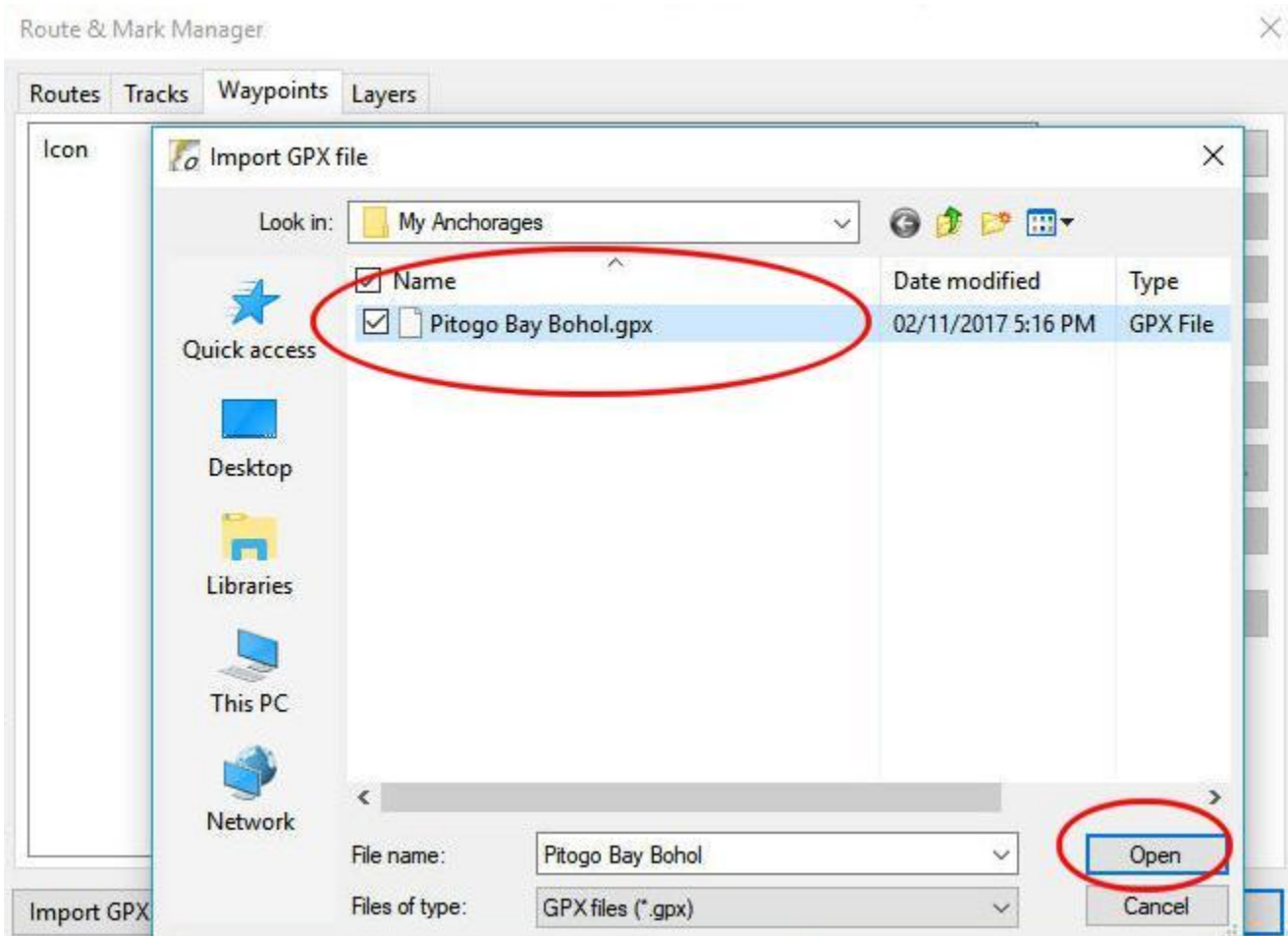
In 'Route & Mark Manager' select the 'Waypoints' tab then click on 'Import GPX ..'



# ANCHORAGES

## Display a Saved Anchorage

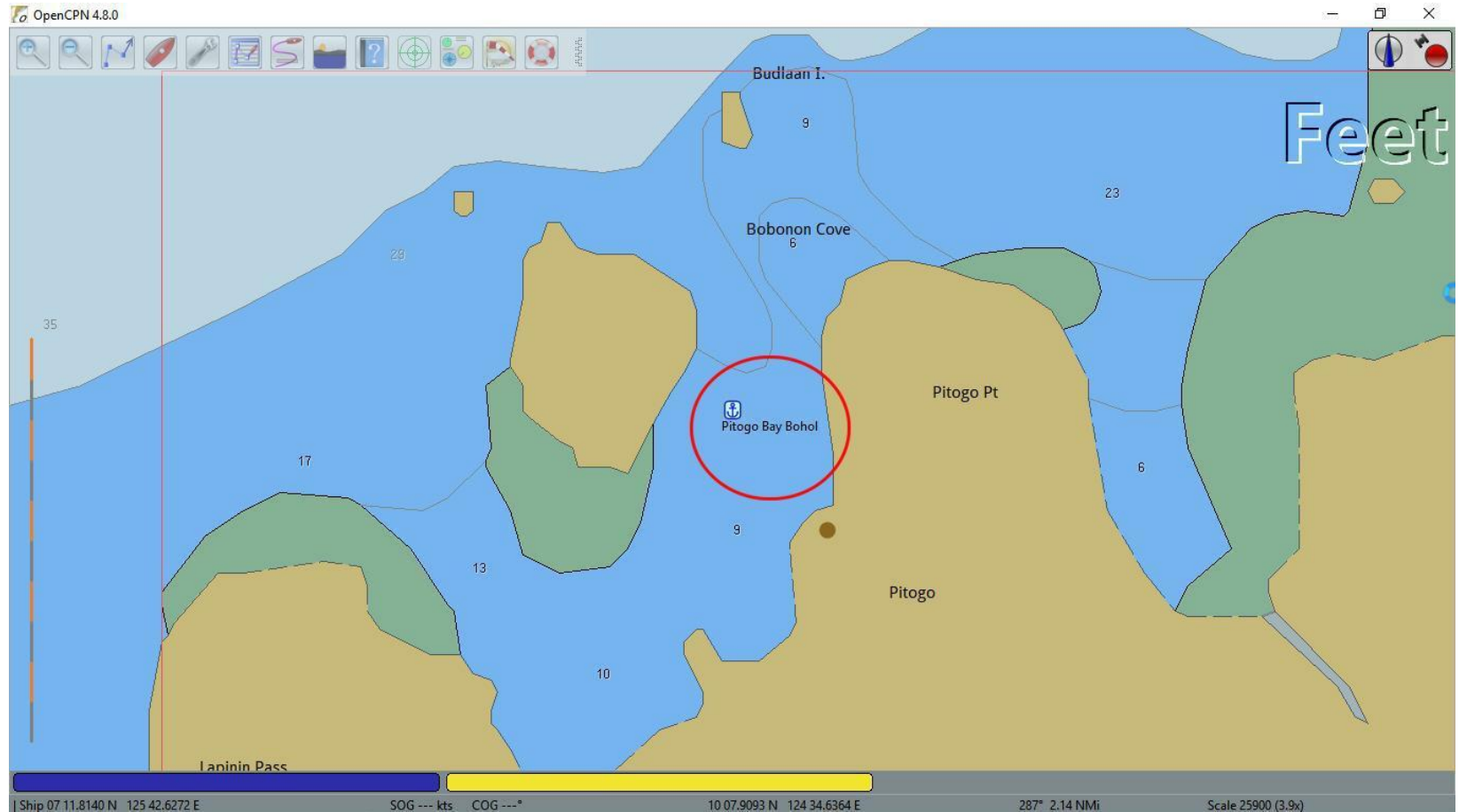
Navigate to your saved anchorages, select the desired anchorage and click on 'Open'.



# ANCHORAGES

## Display a Saved Anchorage

The saved anchorage is displayed.

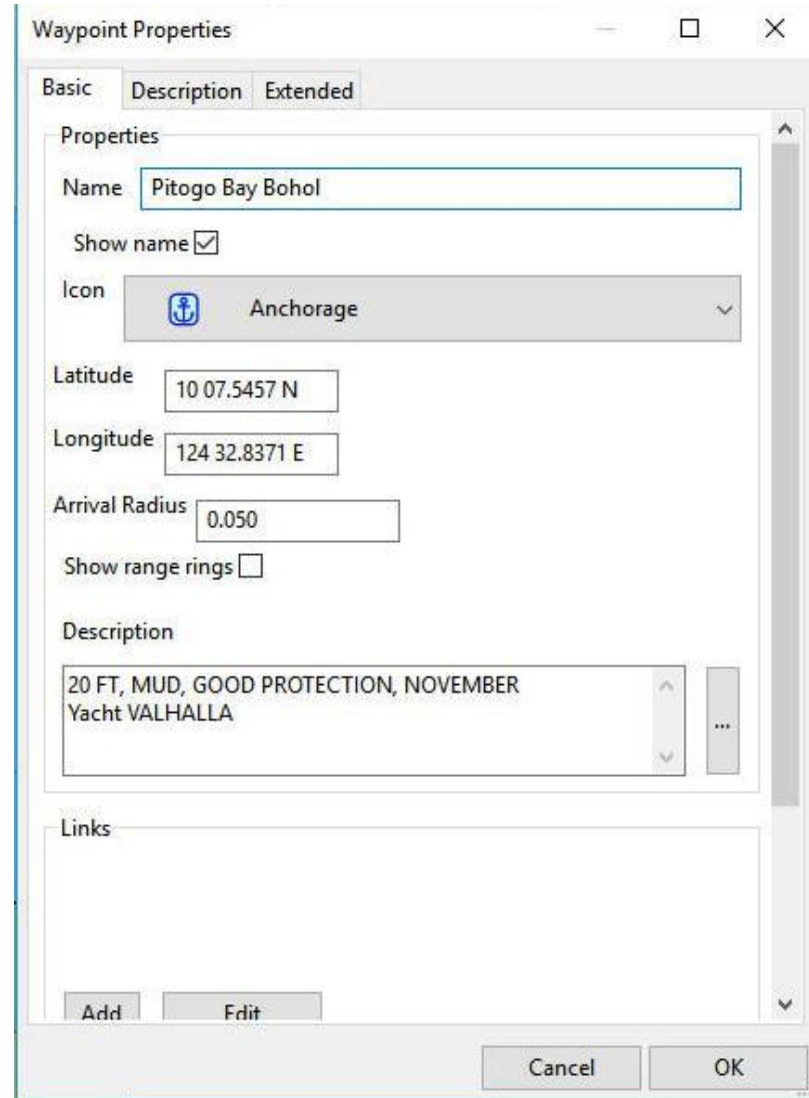


# ANCHORAGES

## Display a Saved Anchorage

To recall information about this anchorage, right-click on the icon and select 'Properties'.

The saved information is displayed.



The image shows a 'Waypoint Properties' dialog box with three tabs: 'Basic', 'Description', and 'Extended'. The 'Basic' tab is active. The 'Properties' section contains the following fields:

- Name:** Pitogo Bay Bohol
- Show name:** ☒
- Icon:** Anchorage (with an anchor icon)
- Latitude:** 10 07.5457 N
- Longitude:** 124 32.8371 E
- Arrival Radius:** 0.050
- Show range rings:** ☐

The **Description** section contains a text area with the following text:

20 FT, MUD, GOOD PROTECTION, NOVEMBER  
Yacht VALHALLA

At the bottom of the dialog, there are buttons for 'Add', 'Edit', 'Cancel', and 'OK'.

# LAYERS

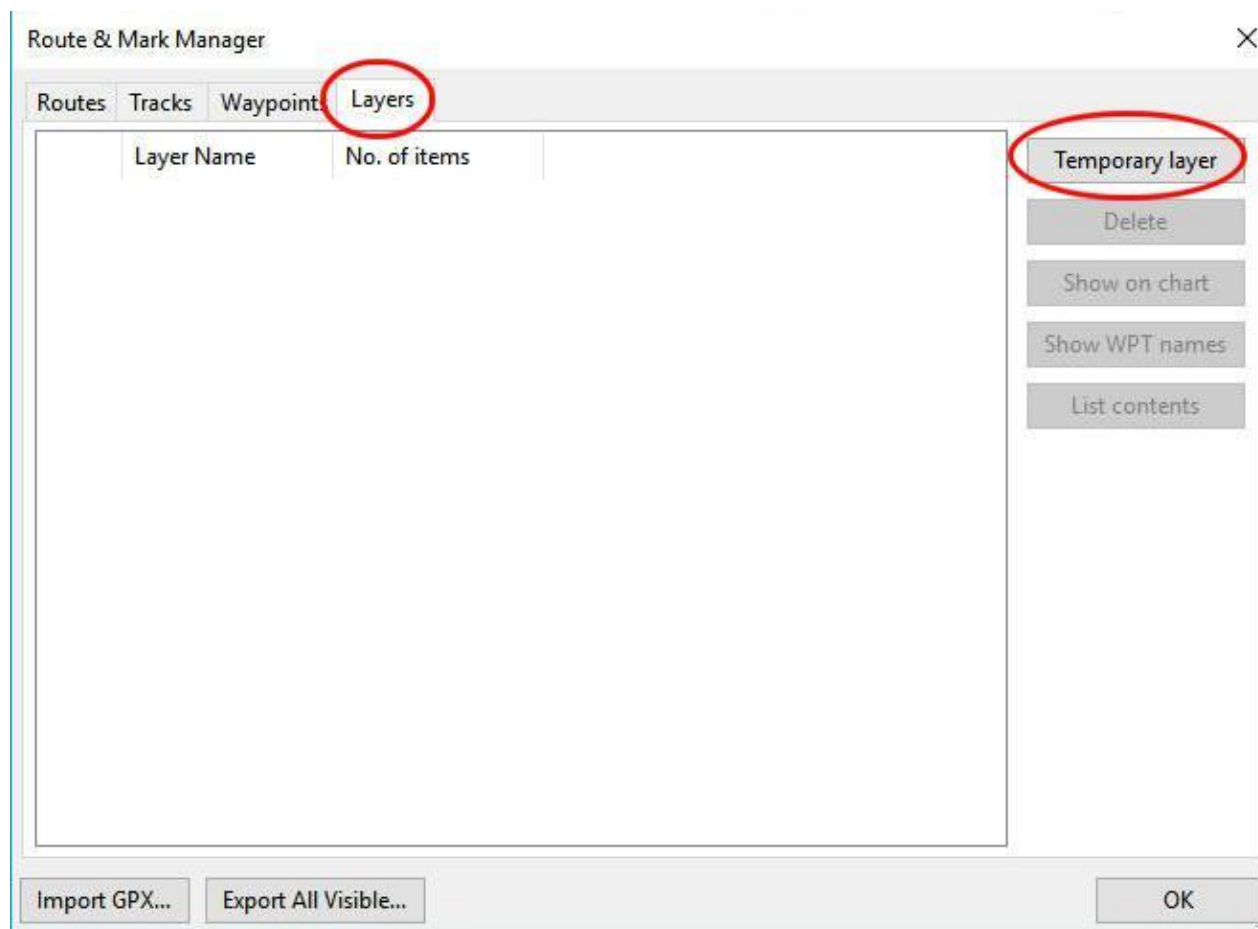
Why Layers? There are two types:

Temporary information during a session  
that can be displayed at will

Permanent information in the program  
that can be displayed at will

# LAYERS

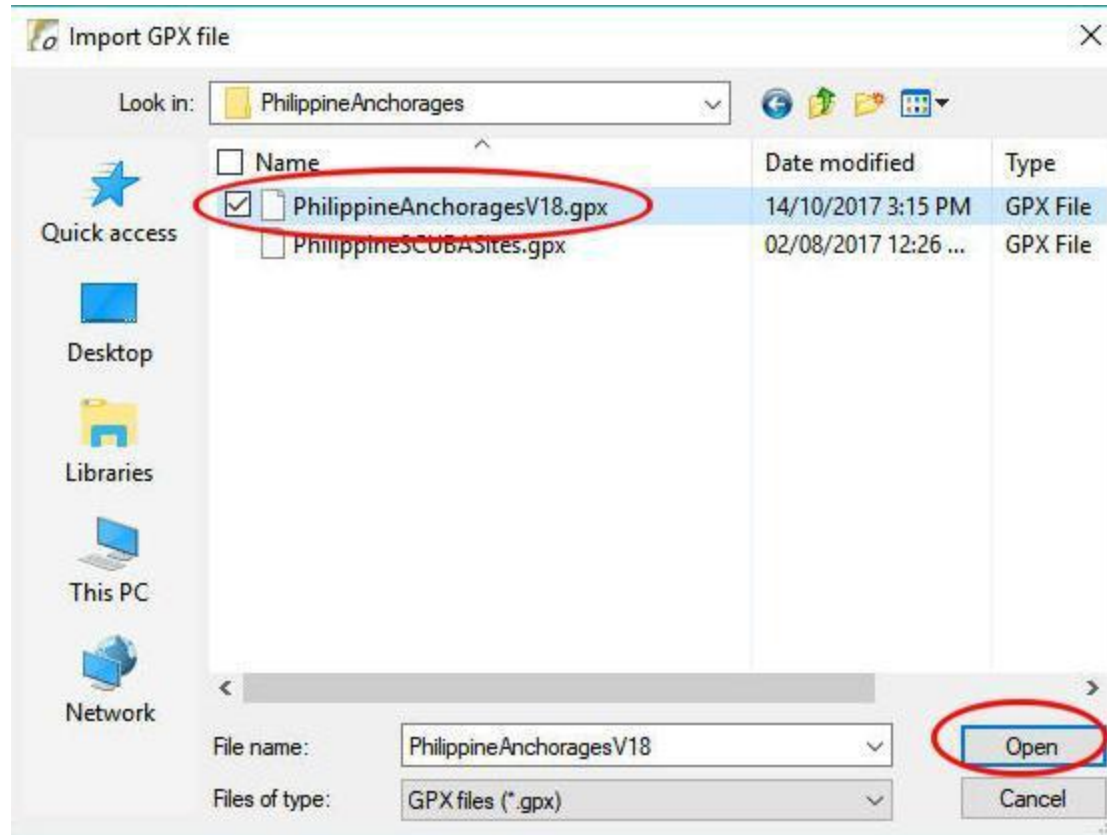
In the 'Route & Mark Manager' open the 'Layers' tab. Click on 'Temporary layer'.





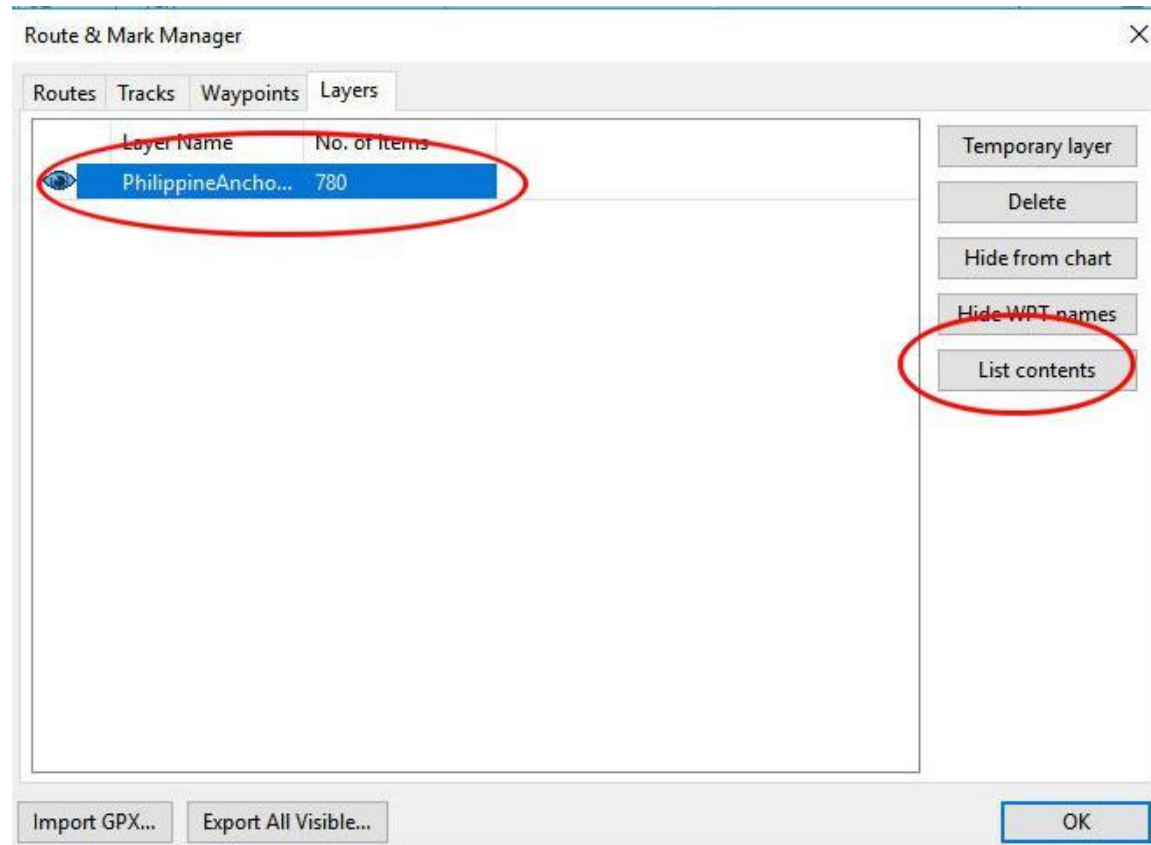
# LAYERS

The 'Import GPX File' window opens. Navigate to the file you want to have in the temporary layer, highlight it and click on 'Open', in this case the 'Philippine AnchoragesV18'.



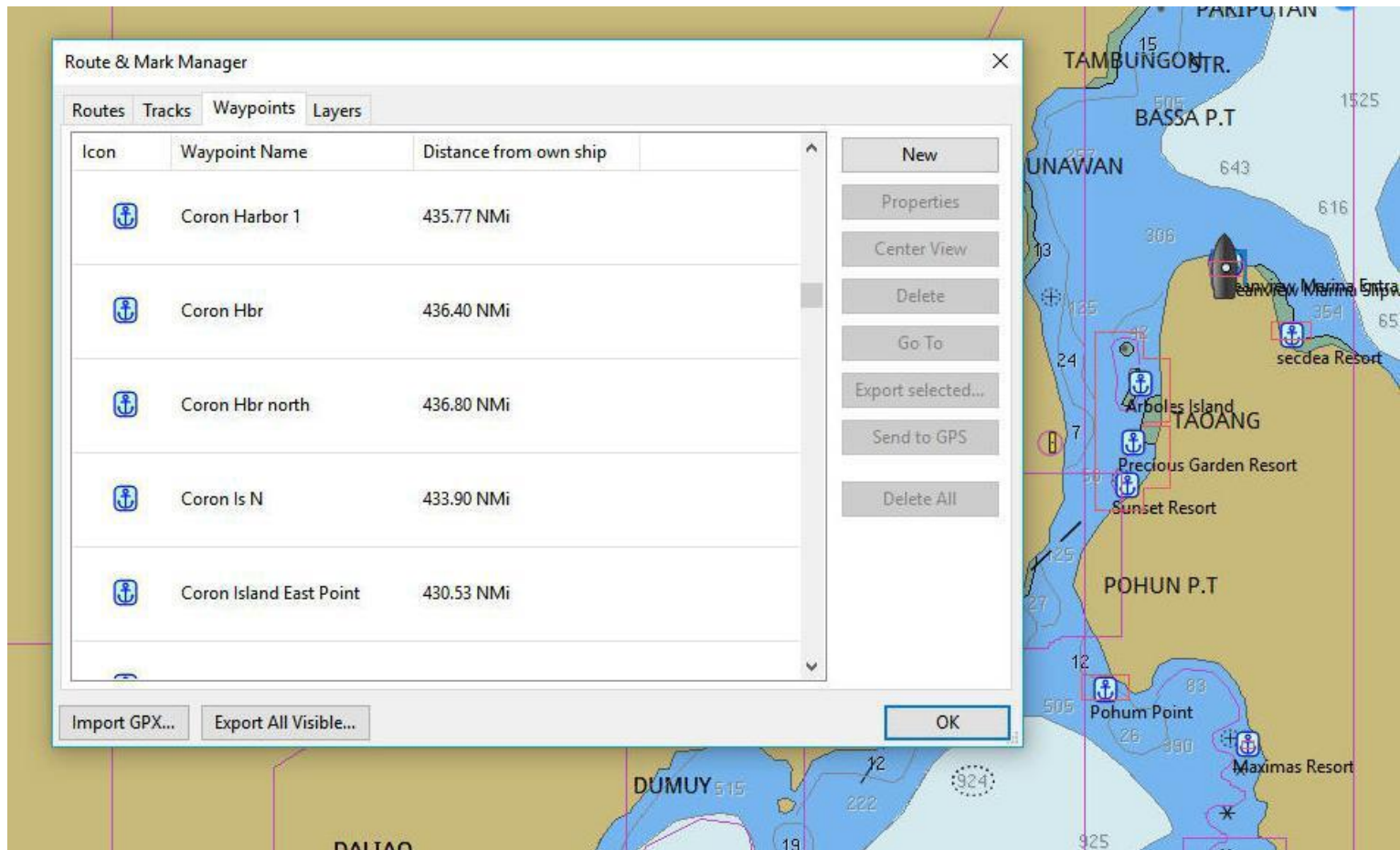
# LAYERS

The file appears under the 'Layers' tab. Select the file and click on 'List contents' to display the anchorages under the 'Waypoints' tab.



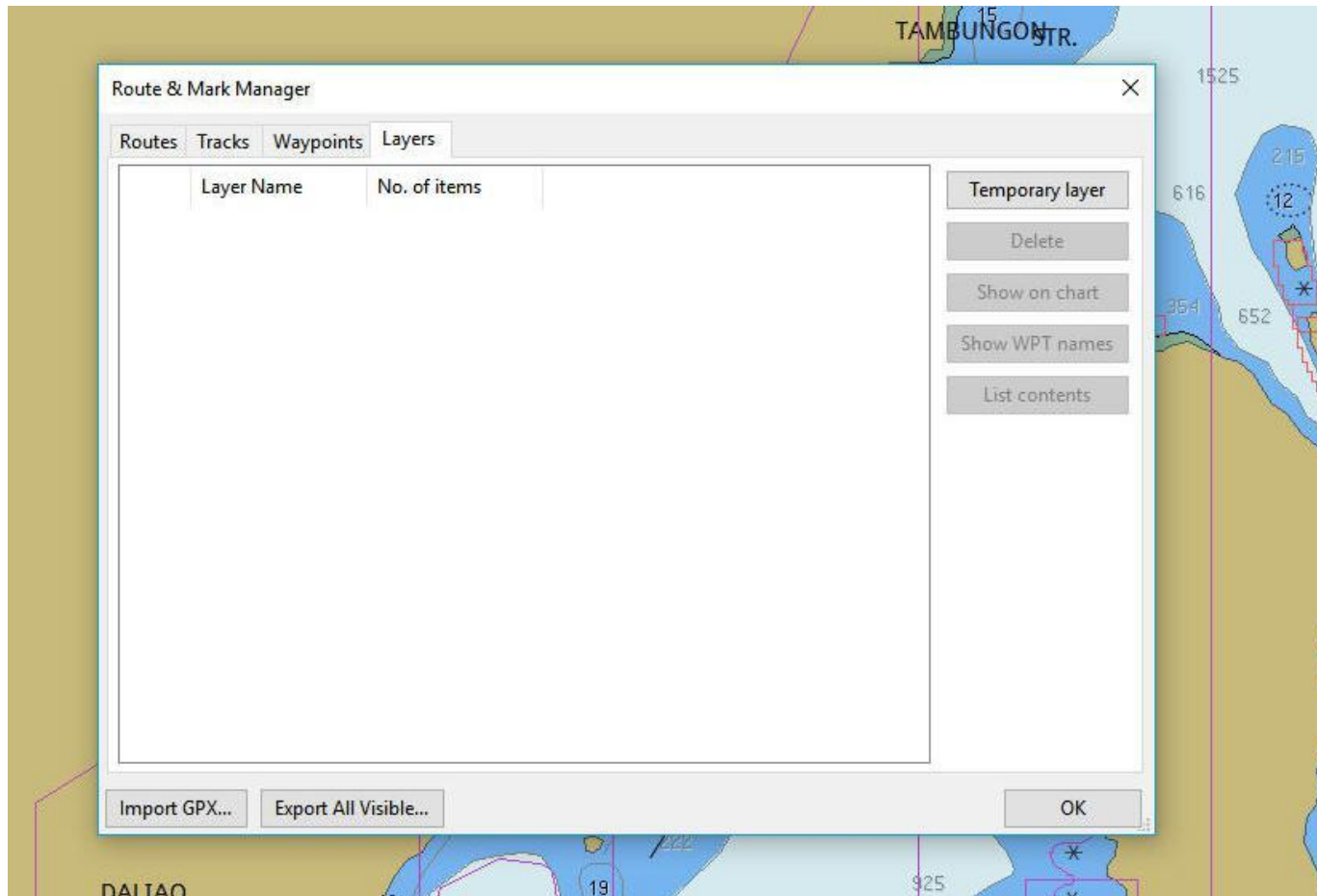
# LAYERS

The anchorages appear under the 'Waypoints' tab.  
The anchorage icons are displayed on the chart.



# LAYERS

If you close OpenCPN and reopen it the file is no longer there ... hence 'Temporary'.



# LAYERS

For layers to be *permanently* available they must be placed within the computer system.

The location is dependent on the Windows operating system ... i.e. Windows XP, 7,8 or 10 but The OpenCPN program helps you find the location !!

For Mac ??

# LAYERS

In all cases of Windows, on OpenCPN click on the 'About OpenCPN' icon (book with ? on the cover) as you did to find the manual.

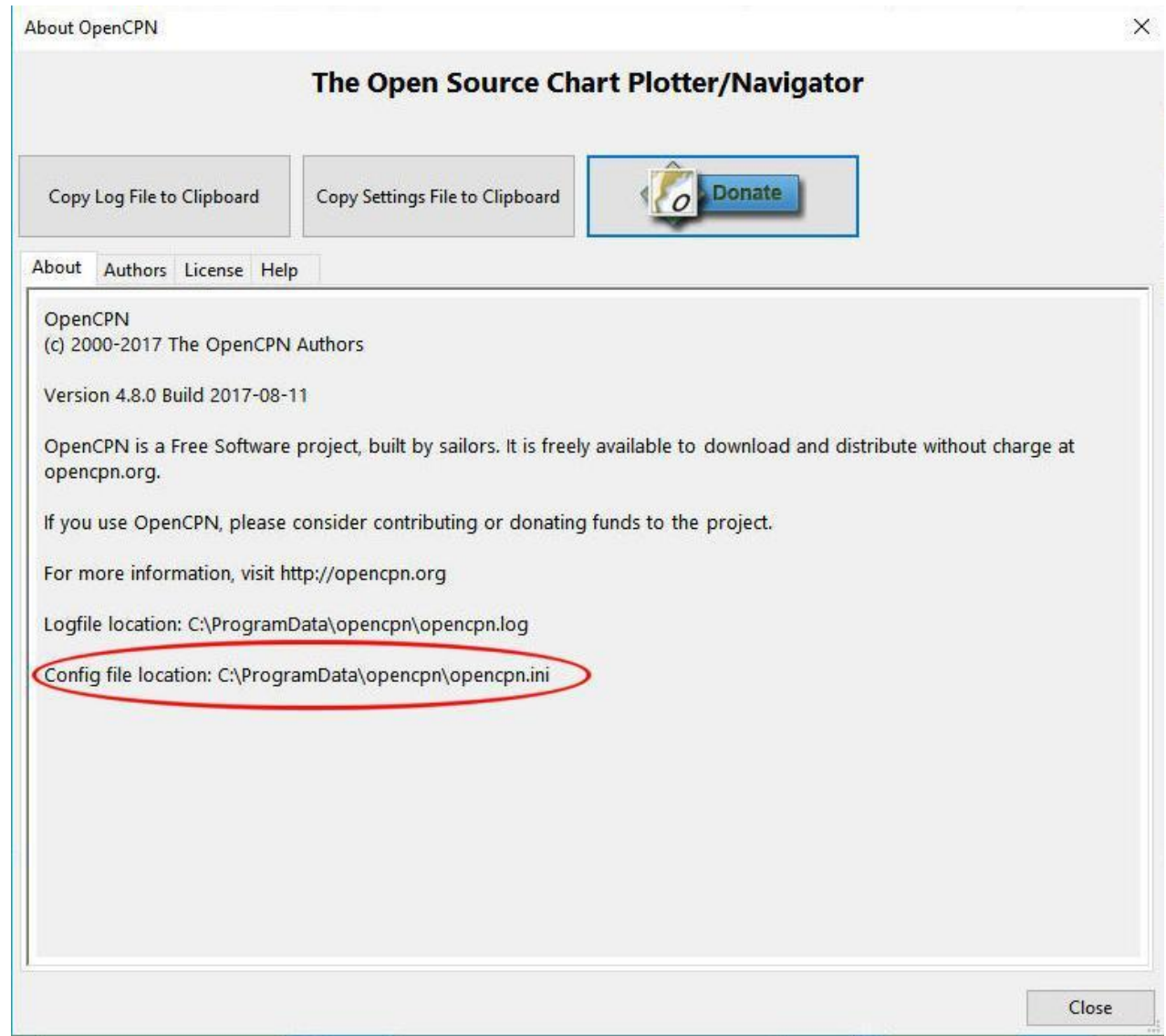




# LAYERS

The Layers folder will be installed at the OpenCPN 'Config file' location e.g. for W8-W10 at C:\Program Data\opencpn

NOTE: This is a 'hidden file' location

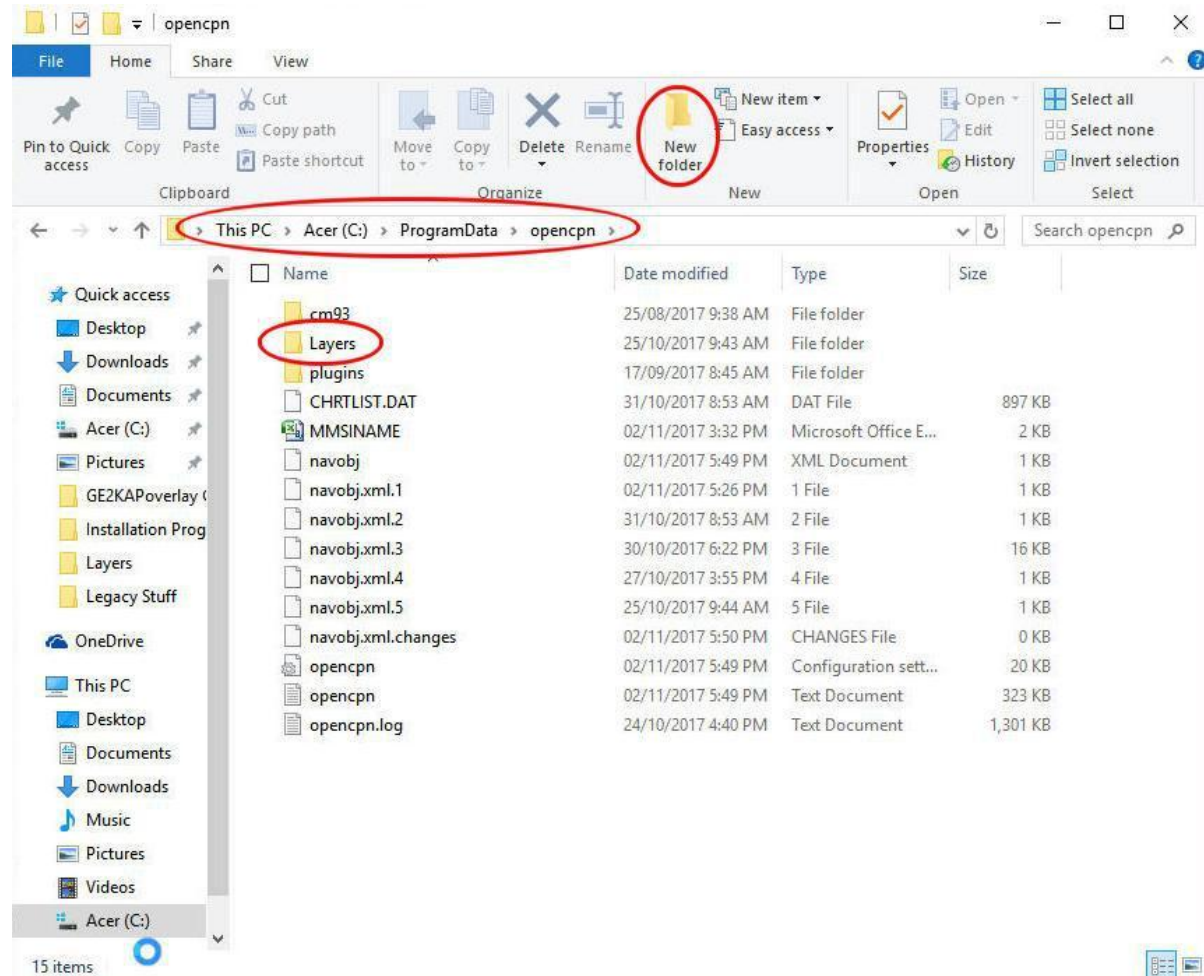


# LAYERS

Create a new folder 'Layers' within the 'opencpn' folder.

It's only necessary to create this folder once.

All future layer information will be placed in this folder.



# LAYERS

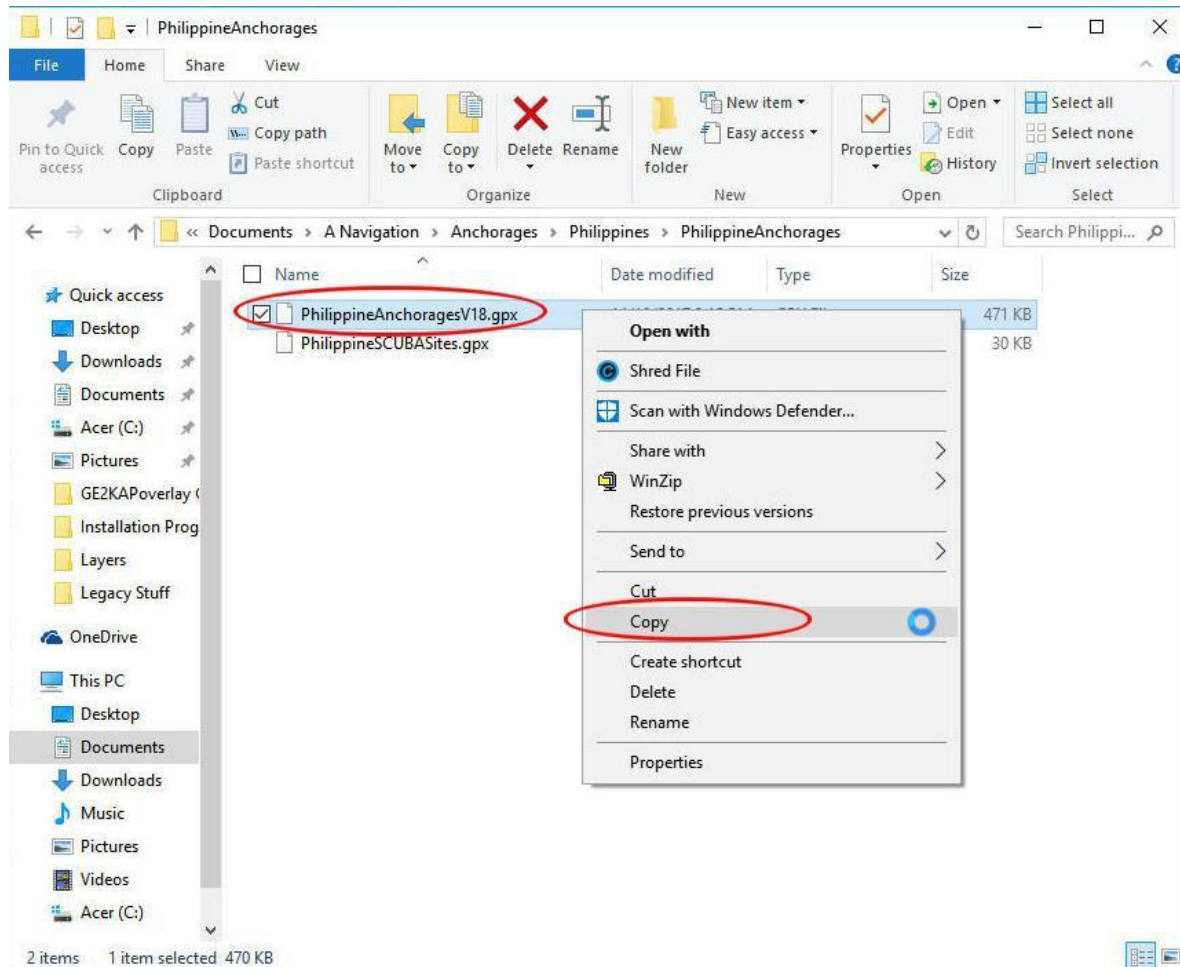
This is where the information you want to be readily available when the program is running. (It can be displayed or not with one click.)

Information such as anchorages, dangers, routes and the like. Though these could be imported from wherever stored on the computer, that can prove to be time-consuming and cumbersome.

Now for how to load up the 'Layers' folder.

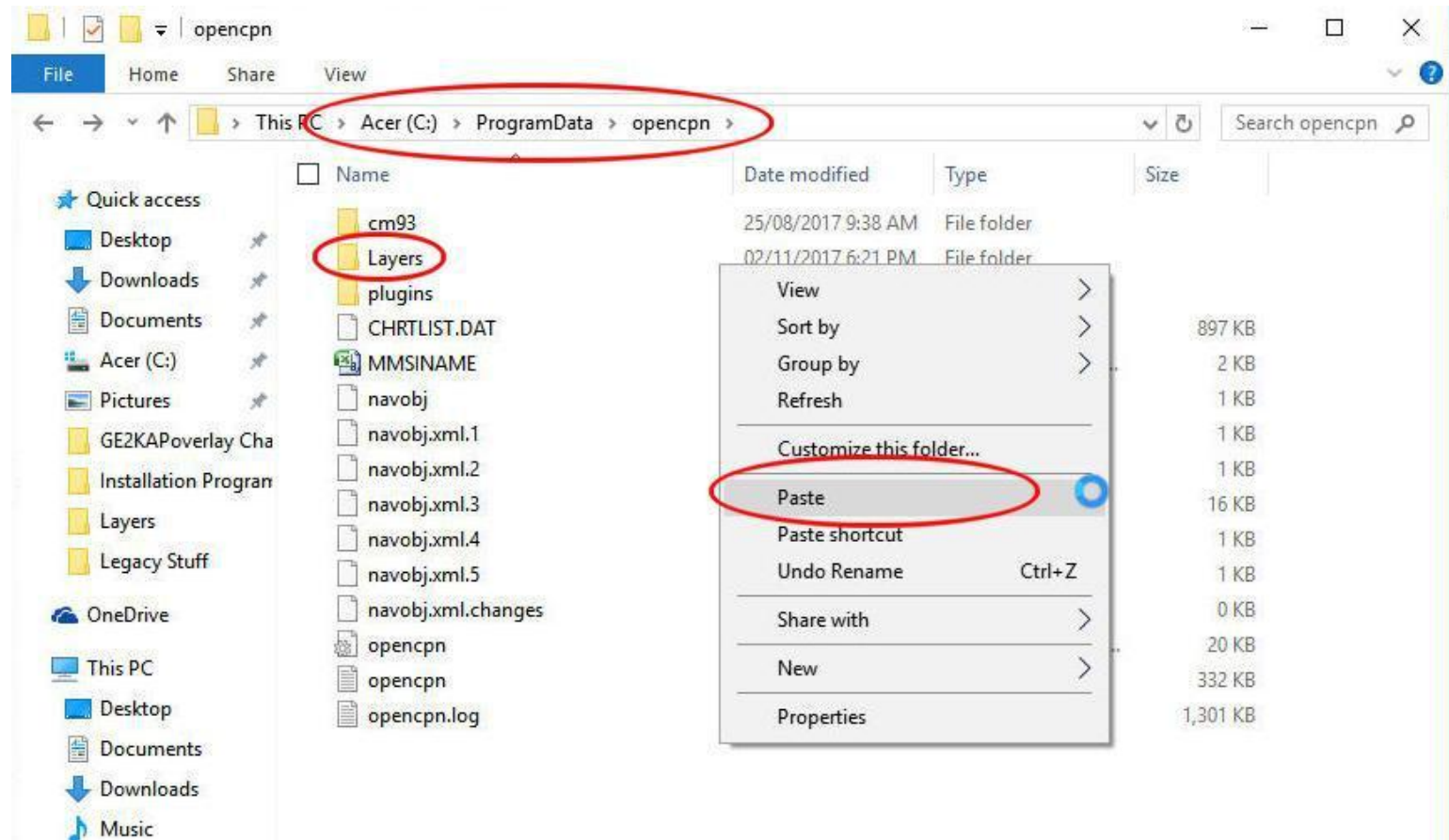
# LAYERS

Here I have navigated to a .gpx file of 'Philippine AnchoragesV18' and copied that file to the clipboard.



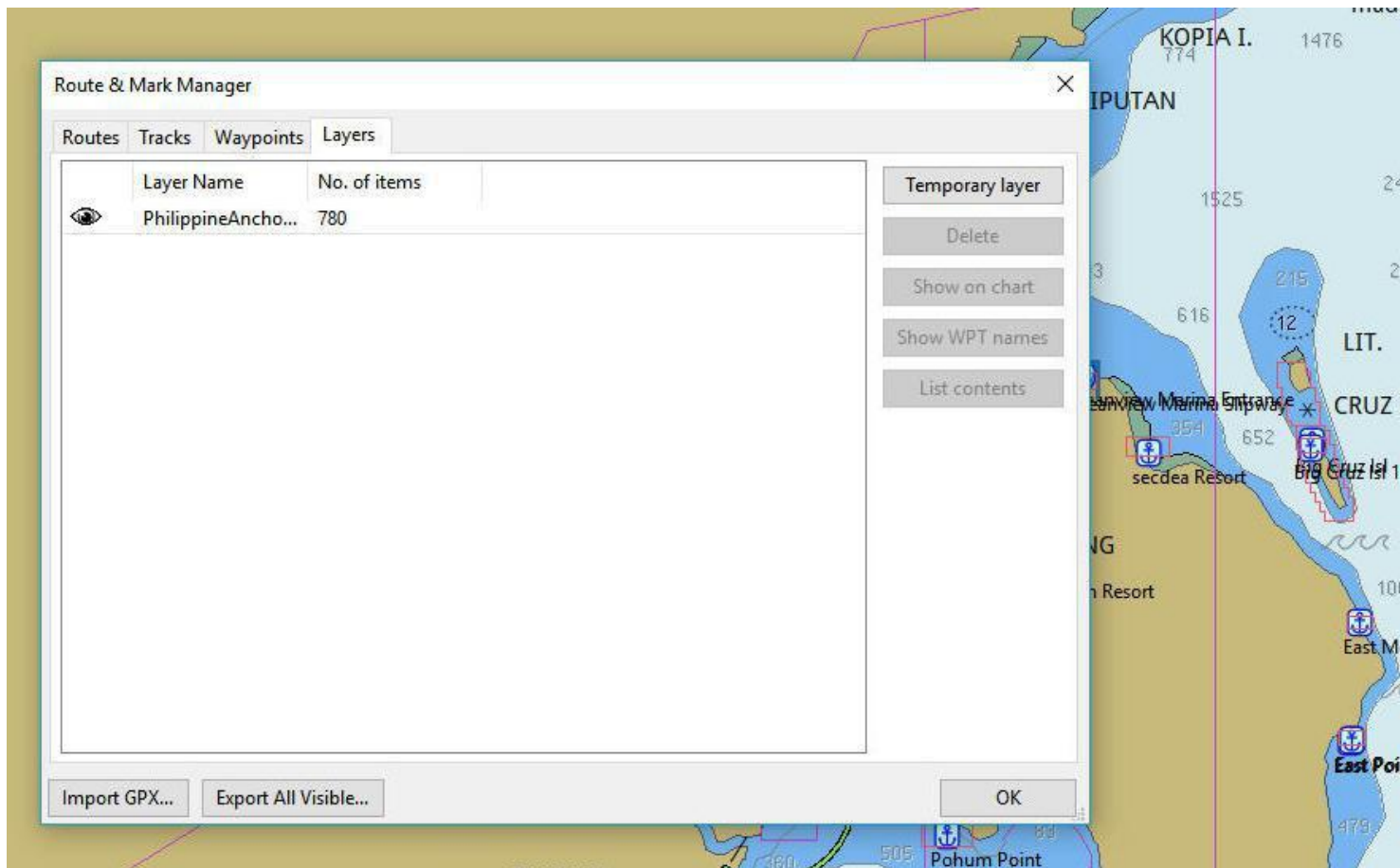
# LAYERS

Return to the 'Layers' folder, right-click on it and paste the file into the folder.



# LAYERS

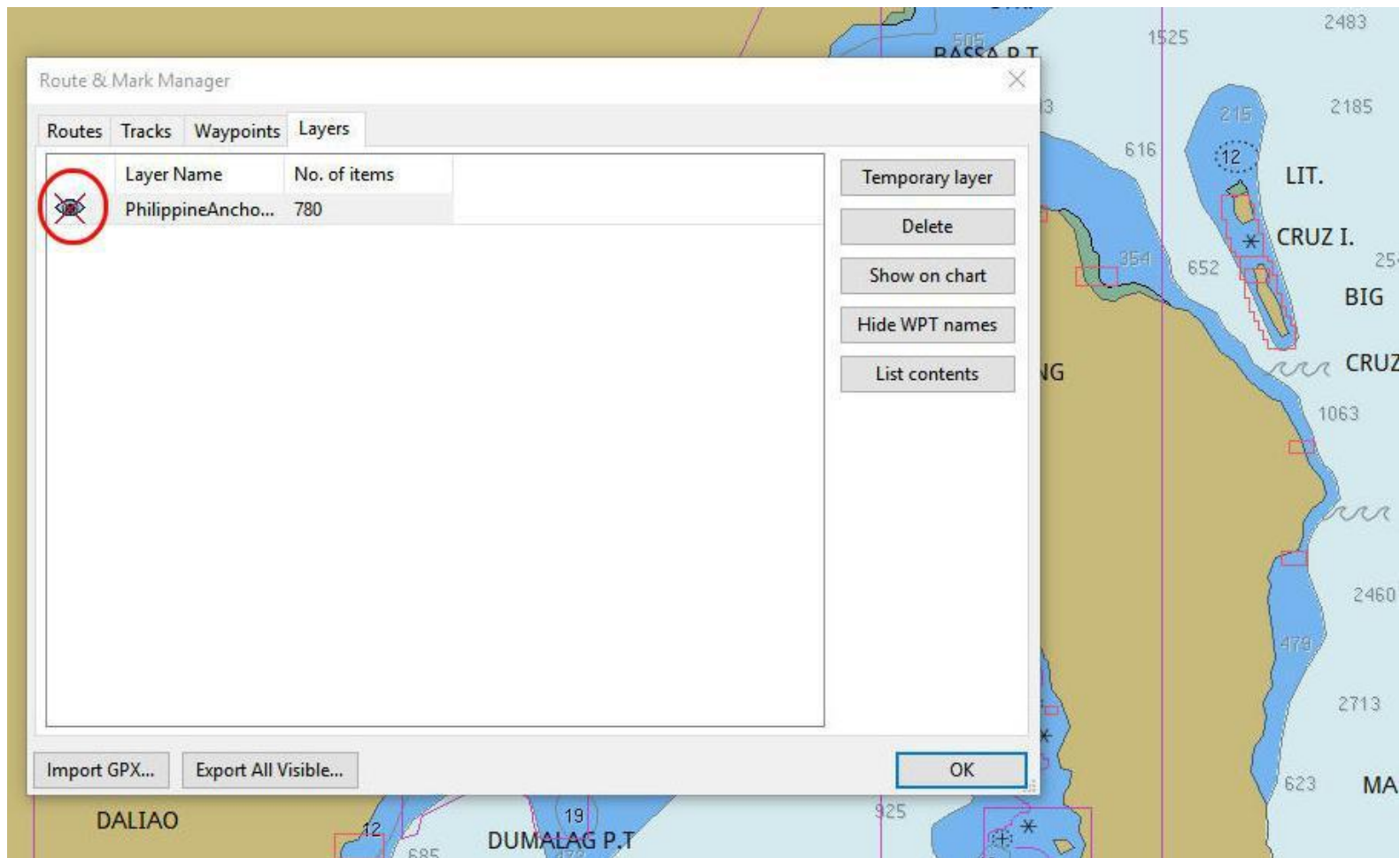
The anchorages are now shown on the 'Layers' tab of the 'Route & Mark Manager' but only after **restarting OpenCPN**.





# LAYERS

To remove the anchorages from the display, click on the 'eye' at the left of the file under the 'Layers' tab. To restore, click on the red 'X'.  
(The 'one-click I said earlier')





# LAYERS

## *POINTS TO REMEMBER*

ANY .gpx file can be put in a layer.

This includes routes, tracks, anchorages and other information that has been saved in the .gpx format.

Waypoints in a layer are locked. This prevents the unplanned movement of a waypoint while clicking on the screen. Remember how to unlock them? And they cannot be edited.

Items in 'Layers' can be displayed or not with a single click

# **PLUGINS**

## **Plugins Included With OpenCPN**

### **Dashboard Plugin**

Plugin to display navigation data. Included in the OpenCPN installation.

### **Grib Weather Plugin.**

Plugin to display Grib weather data files. Included in the OpenCPN installation.

### **WMM Plugin**

A plugin to display the magnetic variation, based on the World Magnetic Model.

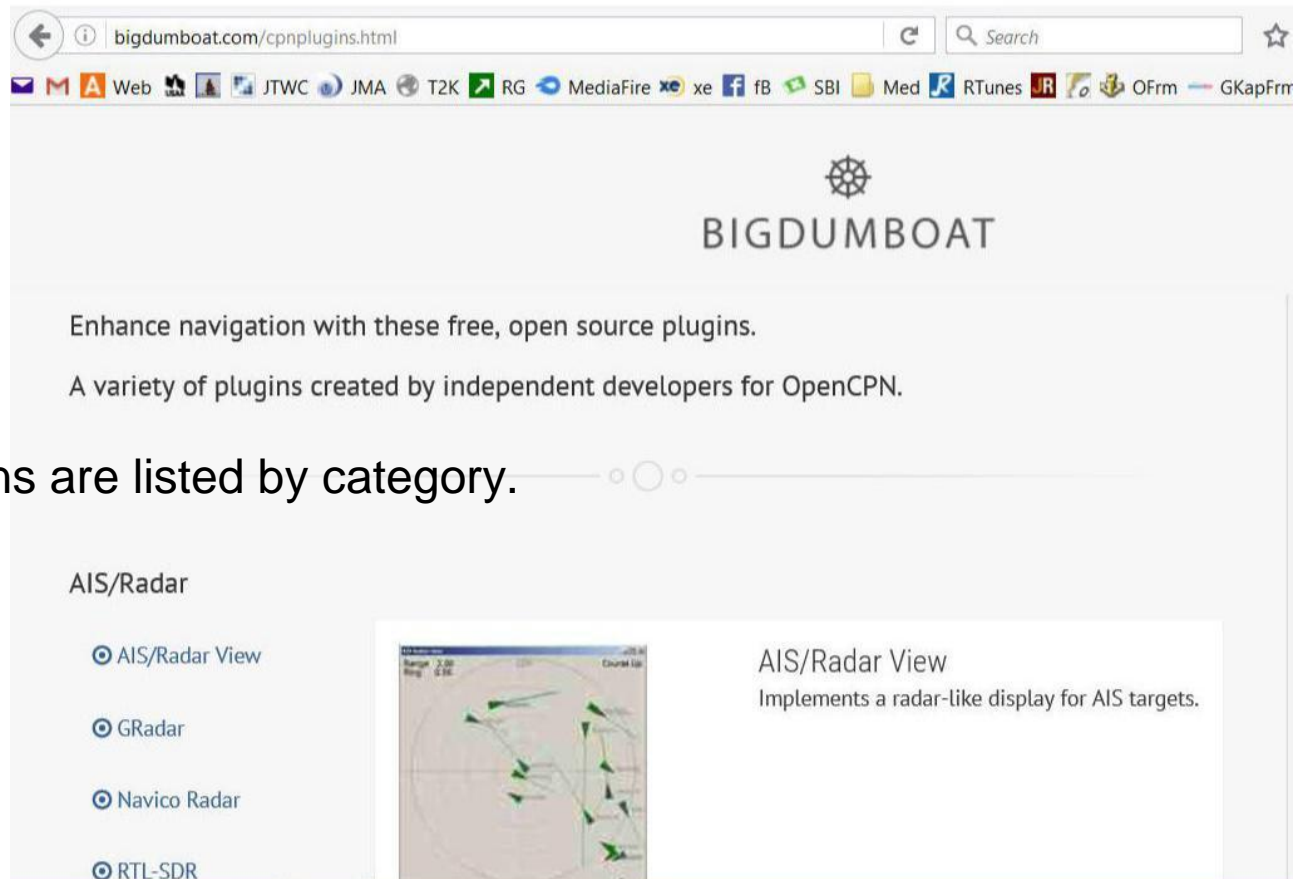
### **Chart Downloader**

Manager for chart downloads.

# PLUGINS

## Additional Plugins

A concise description of the plugins available for OpenCPN Is at: <https://bigdumboat.com/cpnplugins.html>

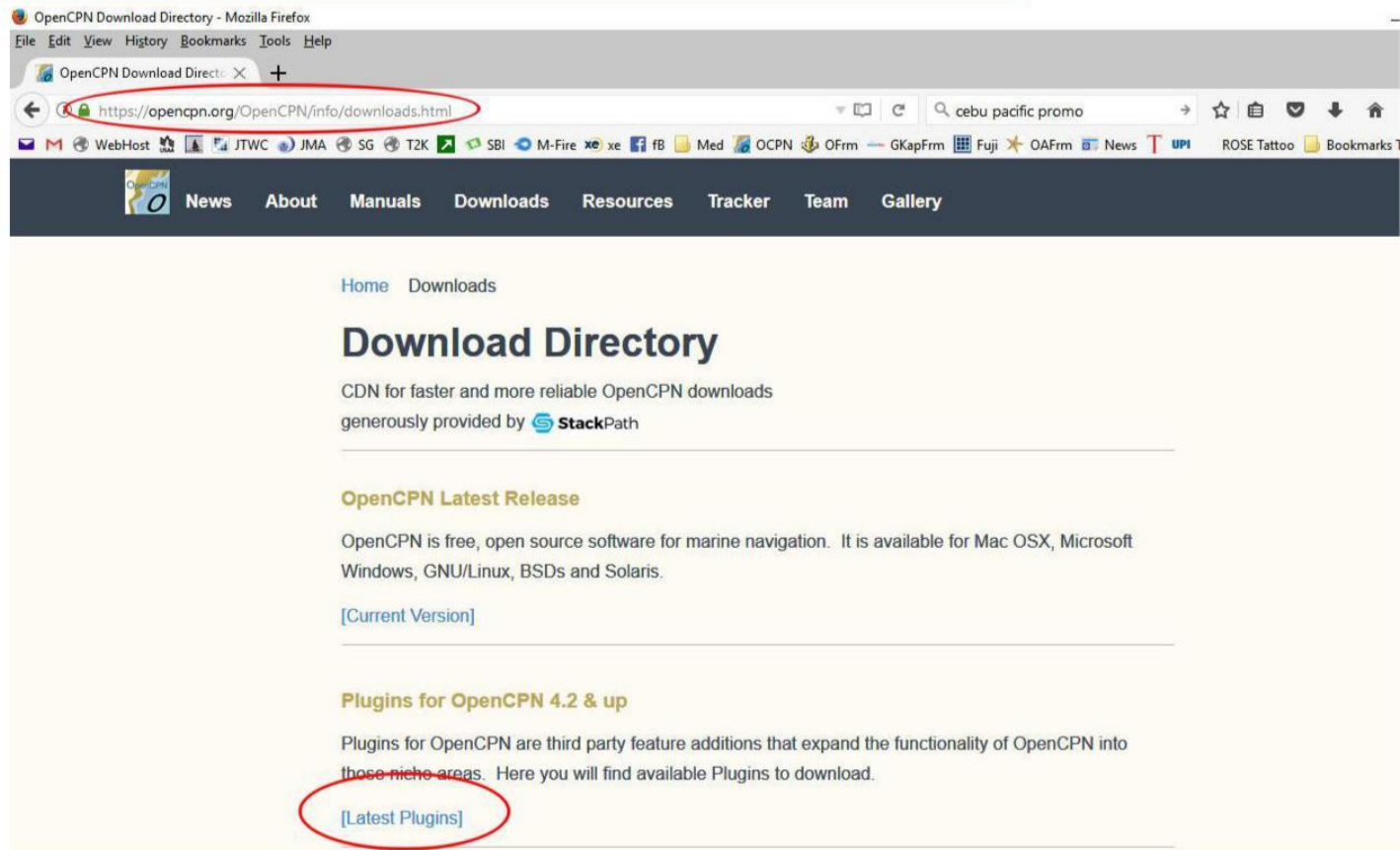


# PLUGINS

## Downloading Plugins

Go to the OpenCPN 'Downloads' page and click on [\[Latest Plugins\]](#)

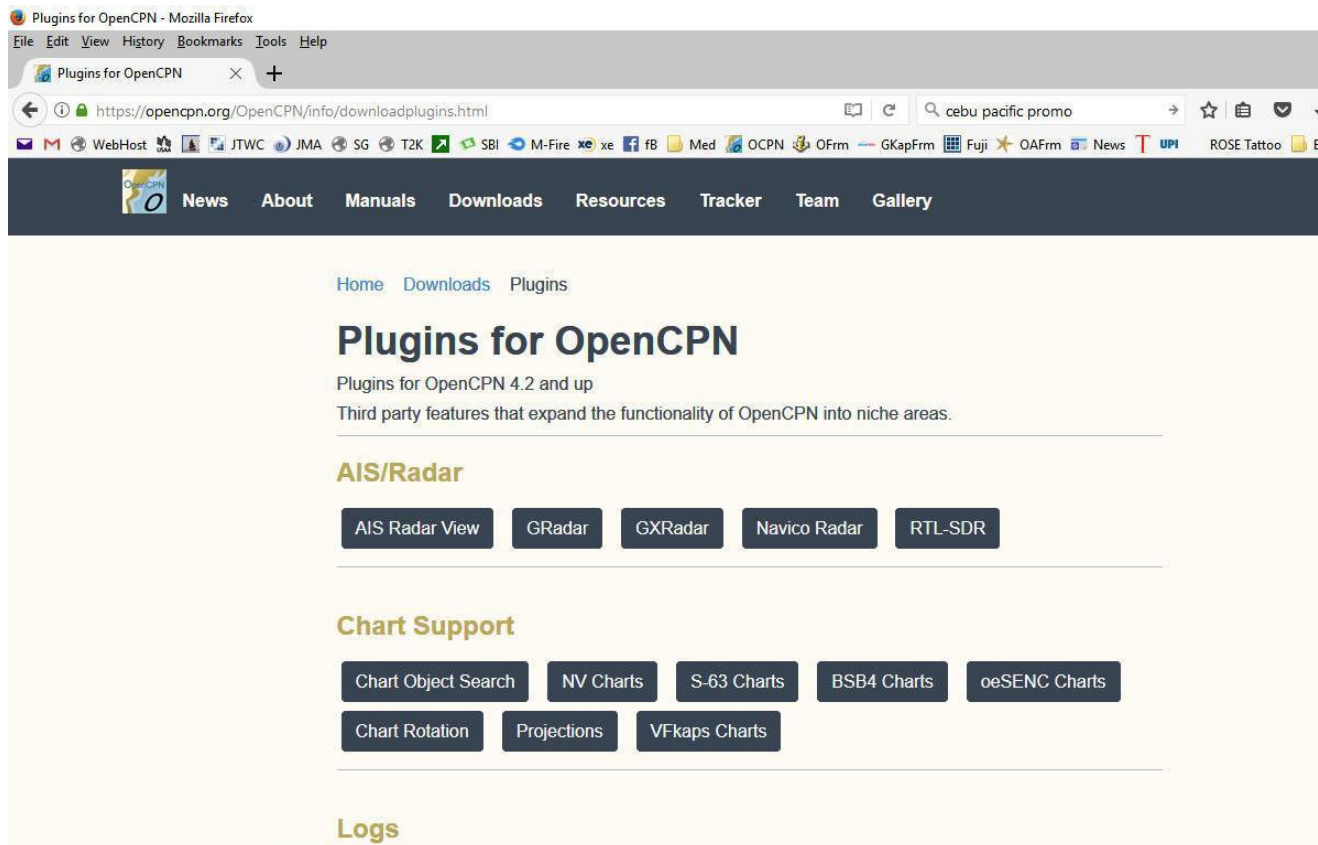
(<http://opencpn.org/OpenCPN/info/downloads.html>)



# PLUGINS

## Downloading Plugins

The *installation programs* for available plugins can be downloaded from [there](https://opencpn.org/OpenCPN/info/downloadplugins.html) for Windows (and also for Linux and Mac OS X)



# Exploring OpenCPN

BYE !



*I hope this has been useful . It took several bottles of red wine to complete. I will blame any mistakes on the wine. Questions? Email: [yachties@yahoo.com](mailto:yachties@yahoo.com)*

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<http://yachtvalhalla.net>

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*18 August 2018*